

A17N: Ed Hart

Access DB#

12/499

SEARCH REQUEST FORM

Scientific and Technical Information Center

CRFE

Requester's Full Name Celine Pian Examiner # 78710 Date: 5/6/04
 An Unit 1636 Phone Number 2-0777 Serial Number 101009445
 Mail Box and Bldg Room Location 2A37 Results Format Preferred (circle) PAPER DISK E-MAIL

2070
 If more than one search is submitted, please prioritize searches in order of need. MEJ'

 Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention OX2 Receptor Homologs

Inventors (please provide full names): Barclay et al.

Earliest Priority Filing Date 5/13/1999

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search SEQ ID NO: 20 - AA-348

MEJ

STAFF USE ONLY

STAFF USE ONLY	Type of Search	Vendors and cost where applicable
Searcher: _____	NA Sequence (#) _____	STN _____
Searcher Phone # _____	AA Sequence (#) <u>1</u>	Dialog _____
Searcher Location _____	Structure (#) _____	Questel Orbit _____
Date Submitted <u>5/27/04</u>	Bibliographic _____	Orbit _____
Date Completed <u>5/27/04</u>	Citation _____	Lexis Nexis _____
Searcher Prep & Review Time _____	Fulltext _____	Sequence Systems <u>ESP</u>
Client Prep Time _____	Patent Family _____	WWW Internet _____
Indexing Time _____	Other _____	Other Vendors _____



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 121499

TO: Celine Qian
Location: rem/2a89/2c70
Art Unit: 1636
Friday, May 07, 2004

Case Serial Number: 10/009445

From: Edward Hart
Location: Biotech-Chem Library
REM-1A55
Phone: 571-272-2512

edward.hart@uspto.gov

Search Notes

Examiner Qian,

Here are the results of the search you requested.

Please feel free to contact me if you have any questions.

Edward Hart



STIC SEARCH RESULT FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact *the searcher or contact:*

Mary Hale, Information Branch Supervisor
571-272-2507 Remsen E01 D86

Voluntary Results Feedback Form

➤ I am an examiner in Workgroup: Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library Remsen Bldg.



Pending Nucleic Acid and Pending Amino Acid database searches generate two sets of results each. The Pending databases have been split into two parts to reduce the amount of time required for their daily updates. This results in more machine time being available for processing searches.

Searches run against the Nucleic Acid Pending database produce two sets of results, with the extensions **.rnpm** and **.rnpn**

Searches run against the Amino Acid Pending database produce two sets of results, with the extensions **.rapm** and **.rapn**

Because they contain data that is confidential, the results of Pending database searches should not be left in the case .

CC antagonists of the OX2R sequences can be used to modulate physiology or
 CC development of a cell, particularly for enhancing myeloid function or
 CC enhancing immunity. The sequences can be used to identify non-OX2 ligands
 CC for an OX2R. The polypeptides and polynucleotides can be used to treat
 CC inflammatory, leukoproliferative, neurodegenerative or post-traumatic
 CC conditions, including atherosclerosis, multiple sclerosis, ischaemia,
 CC neurodegeneration, rheumatoid arthritis, and autoimmune disease.
 CC sequence represents the human OX2R homologue 1.2 (OX2RH1.2) polypeptide
 XX
 SO Sequence 348 AA;

Query Match 100.0%; Score 1846; DB 4; Length 348;
 Best Local Similarity 100.0%; Pred. No. 2.3e-169;
 Matches 348; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRRTANIGLLIITIFIVAEAGAPNNISIMQTSKXENHALASSSLCMEDEKQITON 60
 DB 1 MLCPRRTANIGLLIITIFIVAEAGAPNNISIMQTSKXENHALASSSLCMEDEKQITON 60
 QY 61 YSKVLAEVNTSWPVKATNAVLCCEPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 DB 61 YSKVLAEVNTSWPVKATNAVLCCEPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 QY 121 TNCDEBITWSPDPNSDQIRPVAITHDGYRCIMWTPDGNFRGHLOVLTPEVTL 180
 DB 121 TNCDEBITWSPDPNSDQIRPVAITHDGYRCIMWTPDGNFRGHLOVLTPEVTL 180
 QY 181 FQNRNRTAVCKAVAGKRAQISWIPGDCATKQEYWSNGVTYKSCHEVHNVSTVTC 240
 DB 181 FQNRNRTAVCKAVAGKRAQISWIPGDCATKQEYWSNGVTYKSCHEVHNVSTVTC 240
 QY 241 VSHLTGKNSLYIELLPVPGAKSAKLYIPYIIITIIITVGFIMLVKNGCKRYKLNKT 300
 DB 241 VSHLTGKNSLYIELLPVPGAKSAKLYIPYIIITIIITVGFIMLVKNGCKRYKLNKT 300
 QY 301 ESTPVEEDEMOPVASYTEKNPLDYTNKVKASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNPLDYTNKVKASQALQSEVDTDLHTL 348

RESULT 2
 ABG91409
 ID ABG91409 standard; protein; 348 AA.

AC ABG91409;

DT 29-NOV-2002 (first entry)

DE Primate LP209.

XX Primate; LP194; LP263a; LP263b; LP264; LP265; LP283; LP286; LP284; LP282;
 XX LP273; LP277; LP287; LP209; LP209c; LP209d; LP293; LP294; LP295;
 XX cell proliferative disorder; actinic keratosis; arteriosclerosis;
 XX burster's hepatitis; cancer; autoimmune disorder; inflammatory disorder;
 XX acquired immune deficiency syndrome; AIDS; asthma; anaemia; allergy;
 XX atopic dermatitis; cardiovascular; ischaemic heart disease; tumour;
 XX neurological; epilepsy; stroke; Alzheimer's disease; developmental.

OS Mammalia.

PN WO200263009-A2.

PD 15-AUG-2002.

PF 28-JAN-2002; 2002WO-US000525.

PR 02-FEB-2001; 2001US-0266359P.

PR 21-FEB-2001; 2001US-0270564P.

PR 13-JUL-2001; 2001US-0305058P.

XX (ELIL) LILLY & CO ELI.
 XX Bhattacharya, Calley JN, Heuer JG, Kelenher GP, Lancaster JS, Li Q;

PI Lu D, Mills EJ, Mishra SK, Perkins DR, Rowlinson SW, Smith RC;
 PI Su EW, Wang H, Zhi Y;
 XX WPI; 2002-643415/69.
 DR N-PSDB; AB867725.
 XX New mammalian LP proteins and nucleic acids useful in diagnosing,
 XX treating and preventing cell proliferative, autoimmune/inflammatory,
 XX cardiovascular, neurological, and developmental disorders.
 PS Claim 13; Page 50; 277pp; English.

CC The invention relates to an isolated or recombinant polynucleotide (I)
 CC comprising a mature coding portion of LP194, LP263a, LP263b, LP264,
 CC LP265, LP283, LP286, LP273, LP287, LP209, LP209b,
 CC LP209c, LP209d, LP293, LP294, or LP295; (I) is useful in diagnosing,
 CC treating, and preventing cell proliferative (e.g. actinic keratosis,
 CC arteriosclerosis, burster's hepatitis or cancer), autoimmune/inflammatory
 CC (e.g. acquired immune deficiency syndrome (AIDS), asthma, anaemia,
 CC allergies or atopic dermatitis), cardiovascular (e.g. congestive heart
 CC failure, ischaemic heart disease, myocardial infarction, hypertensive
 CC heart disease, or vascular tumours), neurological (e.g. epilepsy, stroke,
 CC cerebral neoplasms, or Alzheimer's disease), and developmental (e.g.
 CC renal tubular acidosis, Cushing's syndrome, Duchenne and Becker muscular
 CC dystrophy, or hypothyroidism) disorders. These may also be used in
 CC assessing the effects of exogenous compounds on the expression of nucleic
 CC acid and amino acid sequences of such proteins, and in chromosome
 CC identification. The proteins are further used in generating antibody that
 CC specifically and/or selectively binds an LP protein. ABG91397-ABG91415
 CC represent primate LP protein sequences of the invention
 XX

SO Sequence 348 AA;

Query Match 100.0%; Score 1846; DB 5; Length 348;
 Best Local Similarity 100.0%; Pred. No. 2.3e-169;
 Matches 348; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRRTANIGLLIITIFIVAEAGAPNNISIMQTSKXENHALASSSLCMEDEKQITON 60
 DB 1 MLCPRRTANIGLLIITIFIVAEAGAPNNISIMQTSKXENHALASSSLCMEDEKQITON 60
 QY 61 YSKVLAEVNTSWPVKATNAVLCCEPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 DB 61 YSKVLAEVNTSWPVKATNAVLCCEPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 QY 121 TNCDEBITWSPDPNSDQIRPVAITHDGYRCIMWTPDGNFRGHLOVLTPEVTL 180
 DB 121 TNCDEBITWSPDPNSDQIRPVAITHDGYRCIMWTPDGNFRGHLOVLTPEVTL 180
 QY 181 FQNRNRTAVCKAVAGKRAQISWIPGDCATKQEYWSNGVTYKSCHEVHNVSTVTC 240
 DB 181 FQNRNRTAVCKAVAGKRAQISWIPGDCATKQEYWSNGVTYKSCHEVHNVSTVTC 240
 QY 241 VSHLTGKNSLYIELLPVPGAKSAKLYIPYIIITIIITVGFIMLVKNGCKRYKLNKT 300
 DB 241 VSHLTGKNSLYIELLPVPGAKSAKLYIPYIIITIIITVGFIMLVKNGCKRYKLNKT 300
 QY 301 ESTPVEEDEMOPVASYTEKNPLDYTNKVKASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNPLDYTNKVKASQALQSEVDTDLHTL 348

RESULT 3
 ABB82703
 ID ABB82703 standard; protein; 348 AA.

AC ABB82703;

DT 07-MAR-2003 (first entry)

DE Human OX2R/CD200R full-length (FL) protein.

XX OX2; OX2 receptor; OX2R; transmembrane protein; CD200; CD200R; human;

KM cytostatic; immunosuppressive; antiarthritic; antiarteriosclerotic;
 KW antiinflammatory; neuroprotective; thrombolytic; cytokine; OX2R/CD200R;
 receptor.

OS Homo sapiens.

PN WO20028164-A1.

PD 07-NOV-2002.

PF 25-APR-2002; 2002WO-US013087.

PR 26-APR-2001; 2001US-0286686P.

PA (IMMUNEX CORP.

PI Van Der Vuurst De Vries A, Galibert LJ,

DR WPI; 2003-111867/10.

DR N-PSDB; ABV75308.

PT New isolated, soluble OX2 receptor (OX2R) polypeptide and nucleic acid,
 useful in regulating the immune response, for treating or preventing
 immune or inflammatory disorders, e.g. atherosclerosis, arthritis or
 multiple sclerosis.

PS Disclosure; Page 46-47; 64pp; English.

XX The invention relates to an isolated, soluble OX2 receptor (OX2R)
 polypeptide. The OX2 is a transmembrane protein and has been designated
 the human leukocyte antigen CD200. OX2R/CD200R is a member of the
 immunoglobulin superfamily. The OX2R polypeptide and nucleic acid are
 useful in regulating the immune response. The OX2R polypeptide can also
 be used in screening for the inhibitors or agonists of the receptors for
 treating or preventing immune or inflammatory disorders, e.g. arthritis,
 atherosclerosis, multiple sclerosis, systemic lupus erythematosus,
 thrombosis, graft-versus-host disease, or graft rejection, infectious
 disease, or neoplastic disease. The methods are also useful for producing
 information of the identity of a compound that alters one or more
 biological activities of OX2R. The nucleic acids are useful for the
 expression of recombinant proteins, as probes for analysis of the
 presence or distribution of OX2R transcripts, in gene therapy techniques,
 or for replacing defective OX2R DNA. The present sequence represents a
 human OX2R/CD200R full-length polypeptide (designated FI).

XX Sequence 348 AA;

Query Match 100.0%; Score 1846; DB 6; Length 348;
 Best Local Similarity 100.0%; Pred. No. 2,3e-169;

Matches 348; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCWRRTNANGLILITFLVAEAGAAQPNNSIMLOTSEKNAHLASSICMEKQTON 60
 DB 1 MLCWRRTNANGLILITFLVAEAGAAQPNNSIMLOTSEKNAHLASSICMEKQTON 60
 QY 61 YSKYLAENVTSWPKMATNAVLCPPIALRLNLIITTEIILRGPSCTKAYREMETKE 120
 DB 61 YSKYLAENVTSWPKMATNAVLCPPIALRLNLIITTEIILRGPSCTKAYREMETKE 120
 QY 121 TNCCTDERITWVSRPDNSDLQIRPAVATHDGYTCINWTPDGNHRYHQLVTPETVL 180
 DB 121 TNCCTDERITWVSRPDNSDLQIRPAVATHDGYTCINWTPDGNHRYHQLVTPETVL 180
 QY 181 FQNRRTAVCAVAGKPAQISWIPBGCAKQKQWNGVTVASTCHMEVHNVSTVTC 240
 DB 181 FQNRRTAVCAVAGKPAQISWIPBGCAKQKQWNGVTVASTCHMEVHNVSTVTC 240
 QY 241 VSHLTGNSLYIELLPVGAKSASLYPIIILITVGFVWLKNGCRKYLAKNT 300
 DB 241 VSHLTGNSLYIELLPVGAKSASLYPIIILITVGFVWLKNGCRKYLAKNT 300
 QY 301 ESTPVEEDEMOPVASYTEKNNPLYDTNNKVASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNNPLYDTNNKVASQALQSEVDTDLHTL 348

DB 301 ESTPVEEDEMOPVASYTEKNNPLYDTNNKVASQALQSEVDTDLHTL 348

RESULT 4
 AAU29270
 ID AAU29270 standard; protein, 348 AA.

AC AAU29270;

DT 18-DEC-2001 (first entry)

DE Human PRO polypeptide sequence #247.

XX PRO polypeptide; mammal; tumour; cancer; human; cattle; horse; sheep;
 KW dog; cat; pig; goat; rabbit; tumour necrosis factor alpha; TNF-alpha;
 KW blood; chondrocyte cell; cell proliferation; cell differentiation; colon;
 KW adrenal; lung; breast; prostate; rectum; cervix; liver; genetic disorder.

OS Homo sapiens.

PN WO200168848-A2.

PD 20-SEP-2001.

PF 28-FEB-2001; 2001WO-US006520.

PR 01-MAR-2000; 2000WO-US005601.

PR 02-MAR-2000; 2000WO-US005841.

PR 03-MAR-2000; 2000US-0187202P.

PR 06-MAR-2000; 2000US-0186968P.

PR 14-MAR-2000; 2000US-0189320P.

PR 15-MAR-2000; 2000WO-US006884.

PR 21-MAR-2000; 2000US-0190828P.

PR 21-MAR-2000; 2000US-0191007P.

PR 21-MAR-2000; 2000US-0191048P.

PR 21-MAR-2000; 2000US-0191314P.

PR 28-MAR-2000; 2000US-0192655P.

PR 29-MAR-2000; 2000US-0193033P.

PR 30-MAR-2000; 2000US-0193053P.

PR 04-APR-2000; 2000US-0194449P.

PR 04-APR-2000; 2000US-0194647P.

PR 11-APR-2000; 2000US-0195975P.

PR 11-APR-2000; 2000US-0196000P.

PR 11-APR-2000; 2000US-0196187P.

PR 11-APR-2000; 2000US-0196690P.

PR 18-APR-2000; 2000US-0196820P.

PR 18-APR-2000; 2000US-0198123P.

PR 25-APR-2000; 2000US-0199397P.

PR 25-APR-2000; 2000US-0199550P.

PR 25-APR-2000; 2000US-0199654P.

PR 03-MAY-2000; 2000US-0201516P.

PR 17-MAY-2000; 2000WO-US013705.

PR 22-MAY-2000; 2000WO-US014042.

PR 30-MAY-2000; 2000WO-US014941.

PR 02-JUN-2000; 2000WO-US015264.

PR 05-JUN-2000; 2000US-0203832P.

PR 28-JUL-2000; 2000WO-US020710.

PR 22-AUG-2000; 2000US-00644848.

PR 24-AUG-2000; 2000WO-US023328.

PR 08-NOV-2000; 2000WO-US030952.

PR 01-DEC-2000; 2000WO-US032678.

PR 20-DEC-2000; 2000WO-US034956.

PA (GENENTECH INC.

PI Baker KP, Chen J, Desnoyers L, Goddard A, Godowski PJ, Gurney AL;

PI Pan J, Smith V, Watanabe CK, Wood WI, Zhang Z;

DR WPI; 2001-602746/68.

DR N-PSDB; AAS46171.

XX Novel nucleic acids encoding PRO polypeptides, used to diagnose the
PT presence of tumors, such as prostate, and breast tumors, in mammals and to
PT screen for modulators of the compounds.
XX
XX Claim 11; Fig 494; 774pp; English.
XX
CC Sequences AAU29024-AAU29328 represent PRO polypeptides of the invention.
CC The PRO polypeptides and their associated nucleic acids can be used to
CC detect the presence of a tumor in a mammal by comparing the level of
CC expression of a PRO polypeptide in a test sample of cells from the animal
CC and a control sample of normal cells, whereby a higher level of
CC expression in the test sample indicates the presence of a tumor in the
CC mammal. Mammals include dogs, cats, cattle, horses, sheep, pigs, goats
CC and rabbits but are preferably human. The polypeptides can be used to
CC stimulate tumor necrosis factor (TNF) alpha release from human blood,
CC when contacted with it. A specific polypeptide can be used to stimulate
CC the proliferation or differentiation of chondrocyte cells. The PRO
CC proteins can be used to determine the presence of tumors and also
CC susceptibility to tumor development, particularly adrenal, lung, colon,
CC breast, prostate, rectal, cervical, or liver tumors, in mammalian
CC subjects. The oligonucleotide probes specific for the PRO nucleic acids
CC can be used for genetic analysis of individuals with genetic disorders
XX
SQ Sequence 348 AA:

Query Match 99.8%; Score 1843; DB 4; Length 348;
Best Local Similarity 99.7%; Pred. No. 4.5e-169;
Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCGPRTALMGLITITITFLVAVAGAGAPNNLSIMQTSKKNHALASSLCDEKQITON 60
1 MCGPRTALMGLITITITFLVAVAGAGAPNNLSIMQTSKKNHALASSLCDEKQITON 60
DB 1 MCGPRTALMGLITITITFLVAVAGAGAPNNLSIMQTSKKNHALASSLCDEKQITON 60
QY 61 YSKVLAENVTSWPKKATNAVLCCPEIALRNLIITWEIILNGQSCCTKAYKNETNKE 120
61 YSKVLAENVTSWPKKATNAVLCCPEIALRNLIITWEIILNGQSCCTKAYKNETNKE 120
DB 61 YSKVLAENVTSWPKKATNAVLCCPEIALRNLIITWEIILNGQSCCTKAYKNETNKE 120
QY 121 TNCBDRITWVSRPDNSDQTRPAVITHDGYRCIMTTPDNGFRGHVQLVTPETLT 180
121 TNCBDRITWVSRPDNSDQTRPAVITHDGYRCIMTTPDNGFRGHVQLVTPETLT 180
DB 121 TNCBDRITWVSRPDNSDQTRPAVITHDGYRCIMTTPDNGFRGHVQLVTPETLT 180
QY 181 FQNRNATAVCKAVAGPAAQISWIPBGDCATKQEWNSNGTVKSTCHNEVANSVTCH 240
181 FQNRNATAVCKAVAGPAAQISWIPBGDCATKQEWNSNGTVKSTCHNEVANSVTCH 240
DB 181 FQNRNATAVCKAVAGPAAQISWIPBGDCATKQEWNSNGTVKSTCHNEVANSVTCH 240
QY 241 VSHLTGNKSLYIELLVPGAKKSAKYIYIITITITITVGFIMLKNGCRKTKLNT 300
241 VSHLTGNKSLYIELLVPGAKKSAKYIYIITITITITVGFIMLKNGCRKTKLNT 300
DB 241 VSHLTGNKSLYIELLVPGAKKSAKYIYIITITITITVGFIMLKNGCRKTKLNT 300
QY 301 ESTPVVEEDEMQPYASYTEKNPNFLYDTNKKVAKASQALQSEVDTDLHTL 348
301 ESTPVVEEDEMQPYASYTEKNPNFLYDTNKKVAKASQALQSEVDTDLHTL 348
DB 301 ESTPVVEEDEMQPYASYTEKNPNFLYDTNKKVAKASQALQSEVDTDLHTL 348

RESULT 5
ABU58646
ID ABU58646 standard; protein; 348 AA.
XX
XX ABU58646;

XX 15-APR-2003 (first entry)
XX
XX Human PRO polypeptide #247.
XX
XX Human; PRO; cystostatic; tumour; cancer; breast; lung; stomach; liver;
XX dog; cat; cow; horse; sheep; pig; goat; rabbit; ADERT;
XX antibody-dependent enzyme mediated prodrug therapy.
XX
XX Homo sapiens.
XX
XX US2003027272-A1.
XX

PD 06-FEB-2003.
XX
XX 21-JUN-2002; 2002US-00176492.
XX
XX 18-SEP-1997; 97US-0059263P.
XX 18-SEP-1997; 97US-0059266P.
XX 17-OCT-1997; 97US-0062250P.
XX 21-OCT-1997; 97US-0063486P.
XX 24-OCT-1997; 97US-0063120P.
XX 24-OCT-1997; 97US-0063120P.
XX 24-OCT-1997; 97US-0063540P.
XX 28-OCT-1997; 97US-0063541P.
XX 28-OCT-1997; 97US-0063544P.
XX 28-OCT-1997; 97US-0063544P.
XX 29-OCT-1997; 97US-0063734P.
XX 31-OCT-1997; 97US-0063870P.
XX 31-OCT-1997; 97US-0064103P.
XX 13-NOV-1997; 97US-0065311P.
XX 21-NOV-1997; 97US-0066120P.
XX 24-NOV-1997; 97US-0066466P.
XX 24-NOV-1997; 97US-0066772P.
XX 11-DEC-1997; 97US-0069335P.
XX 12-DEC-1997; 97US-0069425P.
XX 17-DEC-1997; 97US-0069870P.
XX 18-DEC-1997; 97US-0068017P.
XX 10-MAR-1998; 98US-0077450P.
XX 11-MAR-1998; 98US-0077632P.
XX 11-MAR-1998; 98US-0077649P.
XX 20-MAR-1998; 98US-0078886P.
XX 20-MAR-1998; 98US-0078886P.
XX 27-MAR-1998; 98US-0079664P.
XX 27-MAR-1998; 98US-0079786P.
XX 31-MAR-1998; 98US-0080107P.
XX 31-MAR-1998; 98US-0080194P.
XX 01-APR-1998; 98US-0080327P.
XX 01-APR-1998; 98US-0080333P.
XX 08-APR-1998; 98US-0081049P.
XX 08-APR-1998; 98US-0081049P.
XX 09-APR-1998; 98US-0081070P.
XX 15-APR-1998; 98US-0081938P.
XX 15-APR-1998; 98US-0082568P.
XX 21-APR-1998; 98US-0082569P.
XX 22-APR-1998; 98US-0082704P.
XX 22-APR-1998; 98US-0082797P.
XX 28-APR-1998; 98US-0083322P.
XX 29-APR-1998; 98US-0083495P.
XX 29-APR-1998; 98US-0083496P.
XX 29-APR-1998; 98US-0083499P.
XX 29-APR-1998; 98US-0083539P.
XX 05-MAY-1998; 98US-0084366P.
XX 06-MAY-1998; 98US-0084414P.
XX 07-MAY-1998; 98US-0084639P.
XX 07-MAY-1998; 98US-0084639P.
XX 07-MAY-1998; 98US-0084639P.
XX 07-MAY-1998; 98US-0084639P.
XX 15-MAY-1998; 98US-0085579P.
XX 15-MAY-1998; 98US-0085580P.
XX 15-MAY-1998; 98US-0085582P.
XX 15-MAY-1998; 98US-0085700P.
XX 18-MAY-1998; 98US-0086023P.
XX 22-MAY-1998; 98US-0086392P.
XX 22-MAY-1998; 98US-0086486P.
XX 26-MAY-1998; 98US-0087098P.
XX 26-MAY-1998; 98US-0087208P.
XX 26-MAY-1998; 98US-0087609P.
XX 02-JUN-1998; 98US-0087759P.
XX 02-JUN-1998; 98US-0087759P.
XX 03-JUN-1998; 98US-0087827P.
XX 04-JUN-1998; 98US-0088028P.
XX 04-JUN-1998; 98US-0088028P.
XX 04-JUN-1998; 98US-0088033P.
XX 04-JUN-1998; 98US-0088033P.
XX 04-JUN-1998; 98US-0088326P.
XX 05-JUN-1998; 98US-0088167P.
XX 05-JUN-1998; 98US-0088202P.

PR 05-JUN-1998; 98US-0088212P.
 PR 05-JUN-1998; 98US-0088217P.
 PR 09-JUN-1998; 98US-0088655P.
 PR 10-JUN-1998; 98US-0088722P.
 PR 10-JUN-1998; 98US-0088728P.
 PR 10-JUN-1998; 98US-0088740P.
 PR 10-JUN-1998; 98US-0088811P.
 PR 10-JUN-1998; 98US-0088824P.
 PR 10-JUN-1998; 98US-0088825P.
 PR 10-JUN-1998; 98US-0088826P.
 PR 11-JUN-1998; 98US-0088861P.
 PR 11-JUN-1998; 98US-0088863P.
 PR 11-JUN-1998; 98US-0088876P.
 PR 12-JUN-1998; 98US-0089030P.
 PR 12-JUN-1998; 98US-0089105P.
 PR 16-JUN-1998; 98US-0089512P.
 PR 16-JUN-1998; 98US-0089514P.
 PR 17-JUN-1998; 98US-0089538P.
 PR 17-JUN-1998; 98US-0089598P.
 PR 17-JUN-1998; 98US-0089653P.
 PR 18-JUN-1998; 98US-0089908P.
 PR 19-JUN-1998; 98US-0089952P.
 PR 22-JUN-1998; 98US-0090246P.
 PR 22-JUN-1998; 98US-0090252P.
 PR 22-JUN-1998; 98US-0090254P.
 PR 24-JUN-1998; 98US-0090429P.
 PR 24-JUN-1998; 98US-0090435P.
 PR 24-JUN-1998; 98US-0090444P.
 PR 24-JUN-1998; 98US-0090461P.
 PR 24-JUN-1998; 98US-0090533P.
 PR 24-JUN-1998; 98US-0090540P.
 PR 25-JUN-1998; 98US-0090676P.
 PR 25-JUN-1998; 98US-0090678P.
 PR 25-JUN-1998; 98US-0090688P.
 PR 25-JUN-1998; 98US-0090690P.
 PR 25-JUN-1998; 98US-0090694P.
 PR 25-JUN-1998; 98US-0090695P.
 PR 25-JUN-1998; 98US-0090696P.
 PR 26-JUN-1998; 98US-00905413.
 PR 26-JUN-1998; 98US-0090862P.
 PR 26-JUN-1998; 98US-0090863P.
 PR 26-JUN-1998; 98US-0091010P.
 PR 01-JUL-1998; 98US-0091359P.
 PR 01-JUL-1998; 98US-0091544P.
 PR 02-JUL-1998; 98US-0091478P.
 PR 02-JUL-1998; 98US-0091486P.
 PR 02-JUL-1998; 98US-0091626P.
 PR 02-JUL-1998; 98US-0091628P.
 PR 02-JUL-1998; 98US-0091632P.
 PR 04-AUG-1998; 98US-0095282P.
 PR 10-AUG-1998; 98US-0095988P.
 PR 10-AUG-1998; 98US-0096012P.
 PR 17-AUG-1998; 98US-0096757P.
 PR 17-AUG-1998; 98US-0096766P.
 PR 17-AUG-1998; 98US-0096867P.
 PR 17-AUG-1998; 98US-0096891P.
 PR 17-AUG-1998; 98US-0096897P.
 PR 18-AUG-1998; 98US-0096949P.
 PR 18-AUG-1998; 98US-0096959P.
 PR 18-AUG-1998; 98US-0097022P.
 PR 26-AUG-1998; 98US-0097952P.
 PR 26-AUG-1998; 98US-0097954P.
 PR 26-AUG-1998; 98US-0097955P.
 PR 26-AUG-1998; 98US-0097971P.
 PR 26-AUG-1998; 98US-0097974P.
 PR 26-AUG-1998; 98US-0098014P.
 PR 01-SEP-1998; 98US-0098716P.
 PR 01-SEP-1998; 98US-0098723P.
 PR 02-SEP-1998; 98US-0098803P.
 PR 02-SEP-1998; 98US-0098821P.
 PR 02-SEP-1998; 98US-0098843P.
 PR 09-SEP-1998; 98US-0099602P.

PR 10-SEP-1998; 98US-0099741P.
 PR 10-SEP-1998; 98US-0099754P.
 PR 10-SEP-1998; 98US-0099763P.
 PR 10-SEP-1998; 98US-0099812P.
 PR 15-SEP-1998; 98US-0099818P.
 PR 16-SEP-1998; 98US-0100622P.
 PR 16-SEP-1998; 98US-0100624P.
 PR 16-SEP-1998; 98US-0100644P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 16-SEP-1998; 98US-01019330.
 PR 17-SEP-1998; 98US-0100683P.
 PR 17-SEP-1998; 98US-0100684P.
 PR 17-SEP-1998; 98US-0100919P.
 PR 17-SEP-1998; 98US-0100930P.
 PR 18-SEP-1998; 98US-0100849P.
 PR 18-SEP-1998; 98US-0101014P.
 PR 18-SEP-1998; 98US-0101014P.
 PR 23-SEP-1998; 98US-0101471P.
 PR 23-SEP-1998; 98US-0101472P.
 PR 23-SEP-1998; 98US-0101473P.
 PR 23-SEP-1998; 98US-0101475P.
 PR 23-SEP-1998; 98US-0101477P.
 PR 23-SEP-1998; 98US-0101738P.
 PR 24-SEP-1998; 98US-0101739P.
 PR 24-SEP-1998; 98US-0101743P.
 PR 24-SEP-1998; 98US-0101922P.
 PR 25-SEP-1998; 98US-0101786P.
 PR 29-SEP-1998; 98US-0102207P.
 PR 29-SEP-1998; 98US-0102240P.
 PR 29-SEP-1998; 98US-0102330P.
 PR 29-SEP-1998; 98US-0102331P.
 PR 30-SEP-1998; 98US-0102487P.
 PR 30-SEP-1998; 98US-0102487P.
 PR 30-SEP-1998; 98US-0102570P.
 PR 30-SEP-1998; 98US-0102571P.
 PR 01-OCT-1998; 98US-0102684P.
 PR 01-OCT-1998; 98US-0102687P.
 PR 02-OCT-1998; 98US-0102685P.
 PR 06-OCT-1998; 98US-0103258P.
 PR 06-OCT-1998; 98US-0103449P.
 PR 07-OCT-1998; 98US-00168978.

Query Match 99.8%; Score 1843; DB 6; Length 348;
 Best Local Similarity 99.7%; Pred. No. 4, 5e-169;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCSPRTANLGLILLITFLVAEAGAAQPNNSLMQTSKENHALASSSLCDEKQITON 60
 DB 1 MCSPRTANLGLILLITFLVAEAGAAQPNNSLMQTSKENHALASSSLCDEKQITON 60
 QY 61 YSKVLAENVTSMPVMAATNAVLCPPIALRNLIITWELIIRGDSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVMAATNAVLCPPIALRNLIITWELIIRGDSCTKAYRKETNETKE 120
 QY 121 TNCEDERTITWVRPQNSDLQIRPVATIHGGYRCIMWTPDGNFRGHLOVLTPEVTL 180
 DB 121 TNCEDERTITWVRPQNSDLQIRPVATIHGGYRCIMWTPDGNFRGHLOVLTPEVTL 180
 QY 161 FQNRRTAVCAVAKKAPAAQISWIEGDCATQOEYWSNGTIVKSTCMEVHNVSTVCH 240
 DB 161 FQNRRTAVCAVAKKAPAAQISWIEGDCATQOEYWSNGTIVKSTCMEVHNVSTVCH 240
 QY 241 VSHLTGNSKSLYTELLPVPVGAKKSAKLYPIYILITIIITVGFIMLKVNGCRKYLKNT 300
 DB 241 VSHLTGNSKSLYTELLPVPVGAKKSAKLYPIYILITIIITVGFIMLKVNGCRKYLKNT 300
 QY 301 ESTPVEEDEMOPVASYTEKKNPLVDITNKVKSQAQLOSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKKNPLVDITNKVKSQAQLOSEVDTDLHTL 348

RESULT 6
 AB088194
 ID AB088194 standard, protein, 348 AA.
 XX
 AC AB088194;

Fri May 7 11:49:13 2004

us-10-009-445a-20.rag

Page 6

[illegible]

PR 18-AUG-1998; 98US-0096949P.
 PR 18-AUG-1998; 98US-0096959P.
 PR 18-AUG-1998; 98US-0097022P.
 PR 26-AUG-1998; 98US-0097952P.
 PR 26-AUG-1998; 98US-0097954P.
 PR 26-AUG-1998; 98US-0097955P.
 PR 26-AUG-1998; 98US-0097971P.
 PR 26-AUG-1998; 98US-0097974P.
 PR 26-AUG-1998; 98US-0098014P.
 PR 01-SEP-1998; 98US-009816P.
 PR 01-SEP-1998; 98US-0098723P.
 PR 02-SEP-1998; 98US-0098803P.
 PR 02-SEP-1998; 98US-0098821P.
 PR 02-SEP-1998; 98US-0098843P.
 PR 09-SEP-1998; 98US-0099602P.
 PR 10-SEP-1998; 98US-0099741P.
 PR 10-SEP-1998; 98US-0099754P.
 PR 10-SEP-1998; 98US-0099763P.
 PR 10-SEP-1998; 98US-0099812P.
 PR 15-SEP-1998; 98US-0100388P.
 PR 16-SEP-1998; 98US-0100662P.
 PR 16-SEP-1998; 98US-0100664P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 17-SEP-1998; 98US-0100684P.
 PR 17-SEP-1998; 98US-0100919P.
 PR 17-SEP-1998; 98US-0100930P.
 PR 18-SEP-1998; 98US-0100849P.
 PR 18-SEP-1998; 98US-0101014P.
 PR 18-SEP-1998; 98US-0101068P.
 PR 23-SEP-1998; 98US-0101471P.
 PR 23-SEP-1998; 98US-0101472P.
 PR 23-SEP-1998; 98US-0101475P.
 PR 23-SEP-1998; 98US-0101477P.
 PR 24-SEP-1998; 98US-0101738P.
 PR 24-SEP-1998; 98US-0101739P.
 PR 24-SEP-1998; 98US-0101743P.
 PR 24-SEP-1998; 98US-0101922P.
 PR 25-SEP-1998; 98US-0101786P.
 PR 25-SEP-1998; 98US-0102207P.
 PR 29-SEP-1998; 98US-0102240P.
 PR 29-SEP-1998; 98US-0102330P.
 PR 29-SEP-1998; 98US-0102331P.
 PR 30-SEP-1998; 98US-0102487P.
 PR 30-SEP-1998; 98US-0102570P.
 PR 30-SEP-1998; 98US-0102571P.
 PR 01-OCT-1998; 98US-0102684P.
 PR 01-OCT-1998; 98US-0102687P.
 PR 02-OCT-1998; 98US-0102965P.
 PR 06-OCT-1998; 98US-0103258P.

Query Match 99.8%; Score 1843; DB 6; Length 348;
 Best Local Similarity 99.7%; Pred. No. 4.5e-169;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPPRTANLGLILITITFLVAEAGAQPNNISMLQTSKENHALLASSLCMDKQITON 60
 DB 1 MLCPPRTANLGLILITITFLVAEAGAQPNNISMLQTSKENHALLASSLCMDKQITON 60
 QY 61 YSKVLAENVTSWPMATNAVLCCPPLALRNLIITWIIIRGQPSCTKARKETNTKE 120
 DB 61 YSKVLAENVTSWPMATNAVLCCPPLALRNLIITWIIIRGQPSCTKARKETNTKE 120
 QY 121 TNCETERTITWSPONSDLOIRPAITHDGYRCIMWTPDGNFRGTHQLVLTPEVTL 180
 DB 121 TNCETERTITWSPONSDLOIRPAITHDGYRCIMWTPDGNFRGTHQLVLTPEVTL 180
 QY 181 FQNRRTAVCAKAVAKPAQAQISWIPEDCATKQEWNSGTYTVYSTCMEVHNASTYTC 240
 DB 181 FQNRRTAVCAKAVAKPAQAQISWIPEDCATKQEWNSGTYTVYSTCMEVHNASTYTC 240
 QY 241 VSHLTGNSLYIELLPVPGAKKSALTYPIYILITIIITVGFILWLKVNCGCRKXKNT 300
 DB 241 VSHLTGNSLYIELLPVPGAKKSALTYPIYILITIIITVGFILWLKVNCGCRKXKNT 300

DB 241 VSHLTGNSLYIELLPVPGAKKSALTYPIYILITIIITVGFILWLKVNCGCRKXKNT 300
 QY 301 ESTPVEDEMOQPYASTEKNNPLVDTTNKYKASQALQSEVDTDLHTL 348
 DB 301 ESTPVEDEMOQPYASTEKNNPLVDTTNKYKASQALQSEVDTDLHTL 348

RESULT 7
 ID ABUS4509 standard; protein; 348 AA.
 AC ABUS4509;
 DT 02-AUG-2003 (first entry)
 DE Human secreted/transmembrane protein (PRO) #247.
 DE Human secreted and transmembrane protein; PRO; TNF-alpha;
 KW tumour; necrosis factor alpha; chondrocyte cell; tumour; Gene therapy;
 KW tissue typing.
 OS Homo sapiens.
 PN US2003032112-A1.
 PD 13-FEB-2003.
 PF 21-JUN-2002; 2002US-00176756.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 17-OCT-1997; 97US-0062250P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 28-OCT-1997; 97US-0063540P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 13-NOV-1997; 97US-0065311P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 11-DEC-1997; 97US-0069335P.
 PR 11-DEC-1997; 97US-0069425P.
 PR 17-DEC-1997; 97US-0069670P.
 PR 18-DEC-1997; 97US-0068017P.
 PR 10-MAR-1998; 98US-0077450P.
 PR 11-MAR-1998; 98US-0077632P.
 PR 11-MAR-1998; 98US-0077649P.
 PR 20-MAR-1998; 98US-0078866P.
 PR 20-MAR-1998; 98US-0078939P.
 PR 27-MAR-1998; 98US-0079664P.
 PR 27-MAR-1998; 98US-0079786P.
 PR 31-MAR-1998; 98US-0080107P.
 PR 31-MAR-1998; 98US-0080194P.
 PR 01-APR-1998; 98US-0080327P.
 PR 01-APR-1998; 98US-0080333P.
 PR 08-APR-1998; 98US-0081049P.
 PR 08-APR-1998; 98US-0081070P.
 PR 08-APR-1998; 98US-0081195P.
 PR 15-APR-1998; 98US-0081838P.
 PR 21-APR-1998; 98US-0082568P.
 PR 21-APR-1998; 98US-0082569P.
 PR 22-APR-1998; 98US-0082704P.
 PR 22-APR-1998; 98US-0082797P.
 PR 28-APR-1998; 98US-0083322P.
 PR 29-APR-1998; 98US-0083495P.
 PR 29-APR-1998; 98US-0083496P.

PR	29-APR-1998	9.8US-00831597
PR	29-APR-1998	9.8US-00831598
PR	05-MAY-1998	9.8US-0084366P
PR	05-MAY-1998	9.8US-0084414P
PR	07-MAY-1998	9.8US-0084639P
PR	07-MAY-1998	9.8US-0084640P
PR	15-MAY-1998	9.8US-0085579P
PR	15-MAY-1998	9.8US-0085580P
PR	15-MAY-1998	9.8US-0085582P
PR	15-MAY-1998	9.8US-0085700P
PR	18-MAY-1998	9.8US-0086023P
PR	22-MAY-1998	9.8US-0086392P
PR	22-MAY-1998	9.8US-0086393P
PR	28-MAY-1998	9.8US-0087098P
PR	02-JUN-1998	9.8US-0087208P
PR	02-JUN-1998	9.8US-0087609P
PR	05-JUN-1998	9.8US-0087759P
PR	05-JUN-1998	9.8US-0088212P
PR	05-JUN-1998	9.8US-0088217P
PR	09-JUN-1998	9.8US-0088655P
PR	10-JUN-1998	9.8US-0088722P
PR	10-JUN-1998	9.8US-0088736P
PR	10-JUN-1998	9.8US-0088740P
PR	10-JUN-1998	9.8US-0088811P
PR	10-JUN-1998	9.8US-0088825P
PR	10-JUN-1998	9.8US-0088826P
PR	11-JUN-1998	9.8US-0088861P
PR	11-JUN-1998	9.8US-0088862P
PR	11-JUN-1998	9.8US-0088876P
PR	12-JUN-1998	9.8US-0089090P
PR	12-JUN-1998	9.8US-0089105P
PR	16-JUN-1998	9.8US-0089512P
PR	16-JUN-1998	9.8US-0089514P
PR	17-JUN-1998	9.8US-0089538P
PR	17-JUN-1998	9.8US-0089539P
PR	17-JUN-1998	9.8US-0089653P
PR	18-JUN-1998	9.8US-0089808P
PR	19-JUN-1998	9.8US-0089952P
PR	22-JUN-1998	9.8US-0090246P
PR	22-JUN-1998	9.8US-0090252P
PR	22-JUN-1998	9.8US-0090254P
PR	24-JUN-1998	9.8US-0090429P
PR	24-JUN-1998	9.8US-0090435P
PR	24-JUN-1998	9.8US-0090450P
PR	24-JUN-1998	9.8US-0090461P
PR	24-JUN-1998	9.8US-0090535P
PR	26-JUN-1998	9.8US-0090540P
PR	26-JUN-1998	9.8US-0090541P
PR	26-JUN-1998	9.8US-0090662P
PR	26-JUN-1998	9.8US-0090663P
PR	01-JUL-1998	9.8US-0091010P
PR	01-JUL-1998	9.8US-0091359P
PR	02-JUL-1998	9.8US-0091544P
PR	02-JUL-1998	9.8US-0091478P
PR	02-JUL-1998	9.8US-0091486P
PR	02-JUL-1998	9.8US-0091626P

PR	02-JUL-1998	98US-00316228
PR	02-JUL-1998	98US-0031632P
PR	24-JUL-1998	98US-0040006P
PR	04-AUG-1998	98US-0095282P
PR	10-AUG-1998	98US-0095598P
PR	17-AUG-1998	98US-0096102P
PR	17-AUG-1998	98US-0096157P
PR	17-AUG-1998	98US-0096166P
PR	17-AUG-1998	98US-0096667P
PR	17-AUG-1998	98US-0096693P
PR	17-AUG-1998	98US-0096697P
PR	17-AUG-1998	98US-0096699P
PR	18-AUG-1998	98US-0096549P
PR	18-AUG-1998	98US-0096559P
PR	18-AUG-1998	98US-0097022P
PR	26-AUG-1998	98US-0097552P
PR	26-AUG-1998	98US-0097545P
PR	26-AUG-1998	98US-0097555P
PR	26-AUG-1998	98US-0097971P
PR	26-AUG-1998	98US-0097974P
PR	26-AUG-1998	98US-0098014P
PR	01-SEP-1998	98US-0098116P
PR	01-SEP-1998	98US-0098213P
PR	02-SEP-1998	98US-0098603P
PR	02-SEP-1998	98US-0098643P
PR	02-SEP-1998	98US-0098843P
PR	09-SEP-1998	98US-0099602P
PR	10-SEP-1998	98US-0099741P
PR	10-SEP-1998	98US-0099754P
PR	10-SEP-1998	98US-0099763P
PR	10-SEP-1998	98US-0099812P
PR	16-SEP-1998	98US-0100386P
PR	16-SEP-1998	98US-0100642P
PR	16-SEP-1998	98US-0100644P
PR	16-SEP-1998	98US-0101515P
PR	16-SEP-1998	98MO-00501330
PR	17-SEP-1998	98US-0100683P
PR	17-SEP-1998	98US-0100684P
PR	17-SEP-1998	98US-0100919P
PR	17-SEP-1998	98US-0100930P
PR	18-SEP-1998	98US-0100849P
PR	18-SEP-1998	98US-0101014P
PR	18-SEP-1998	98US-0101068P
PR	23-SEP-1998	98US-0101471P
PR	23-SEP-1998	98US-0101472P
PR	23-SEP-1998	98US-0101475P
PR	23-SEP-1998	98US-0101477P
PR	24-SEP-1998	98US-0101136P
PR	24-SEP-1998	98US-0101138P
PR	24-SEP-1998	98US-0101143P
PR	24-SEP-1998	98US-0101922P
PR	25-SEP-1998	98US-0101786P
PR	25-SEP-1998	98US-0102070P
PR	25-SEP-1998	98US-0102240P
PR	29-SEP-1998	98US-0102330P
PR	29-SEP-1998	98US-0102331P
PR	30-SEP-1998	98US-0102487P
PR	30-SEP-1998	98US-0102570P
PR	30-SEP-1998	98US-0102571P
PR	01-OCT-1998	98US-0102684P
PR	01-OCT-1998	98US-0102687P
PR	02-OCT-1998	98US-0102655P
PR	06-OCT-1998	98US-0103358P
PR	07-OCT-1998	98US-0103445P
PR	07-OCT-1998	98US-0016897P

Query Match	99.8%	Score 1843	DB 6	Length 348
Best Local Similarity	99.7%	Pred. No. 4.5e-169		
Matches 347	Conservative	1	Mismatches 0	Indels 0
				Gaps 0

Qy 1 MLCPRRTANIGLLILITIFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITQN 600

Db 1 MLCPRRTANIGLLILITIFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITQN 600

QY 61 YSKYLAENVNTSMFYKMATNAVLCPPIALRRLIIITWEIIIRGQPSCTKAYRKEINETKE 120
Db 61 YSKYLAENVNTSMFYKMATNAVLCPPIALRRLIIITWEIIIRGQPSCTKAYRKEINETKE 120
QY 121 TNCYDERITWVSRPDQNSDLQIRFVAITHDGYNCIMVTPDGNHFRGYHLOVLTPEVTL 180
Db 121 TNCYDERITWVSRPDQNSDLQIRFVAITHDGYNCIMVTPDGNHFRGYHLOVLTPEVTL 180
QY 181 FQNNRFRACVAVGKAPAOISWIPEDGCATKCKEYMSNGVATVSTGHEVHNVSTVTC 240
Db 181 FQNNRFRACVAVGKAPAOISWIPEDGCATKCKEYMSNGVATVSTGHEVHNVSTVTC 240
QY 241 VSHLTGKSLYIELLPYPGAKKSAKLYIPYIIILITIIITVGFIMLKVNGCRKYLKNT 300
Db 241 VSHLTGKSLYIELLPYPGAKKSAKLYIPYIIILITIIITVGFIMLKVNGCRKYLKNT 300
QY 301 ESTVVEDEMOQPYASTYKKNPLVDTTNKVKASQALQSEVDDTLHL 348
Db 301 ESTVVEDEMOQPYASTYKKNPLVDTTNKVKASQALQSEVDDTLHL 348

RESULT 8
ABR66383
ID ABR66383 standard; protein, 348 AA.
XX ABR66383;
AC
XX
DT 05-AUG-2003 (first entry)
XX
DE Human secreted polypeptide PRO6015, SEQ ID NO:494.
XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antitachytic; vulnerability; gene therapy.
XX
XX Homo sapiens.
XX OS
XX US2003027278-A1.
XX
XX
XX 06-FEB-2003.
XX
XX
XX 21-JUN-2002; 2002US-00176987.
XX
XX 18-SEP-1997; 97US-0059263P.
XX 18-SEP-1997; 97US-0059266P.
XX 17-OCT-1997; 97US-0062250P.
XX 21-OCT-1997; 97US-0063486P.
XX 24-OCT-1997; 97US-0063120P.
XX 24-OCT-1997; 97US-0063121P.
XX 28-OCT-1997; 97US-0063540P.
XX 28-OCT-1997; 97US-0063541P.
XX 28-OCT-1997; 97US-0063544P.
XX 28-OCT-1997; 97US-0063564P.
XX 29-OCT-1997; 97US-0063734P.
XX 31-OCT-1997; 97US-0063870P.
XX 31-OCT-1997; 97US-0064103P.
XX 13-NOV-1997; 97US-0066131P.
XX 21-NOV-1997; 97US-0066120P.
XX 24-NOV-1997; 97US-0066466P.
XX 24-NOV-1997; 97US-0066772P.
XX 11-DEC-1997; 97US-0068335P.
XX 12-DEC-1997; 97US-0068425P.
XX 17-DEC-1997; 97US-0069870P.
XX 18-DEC-1997; 97US-0068017P.
XX 10-MAR-1998; 98US-0077450P.
XX 11-MAR-1998; 98US-0077633P.
XX 11-MAR-1998; 98US-0077649P.
XX 20-MAR-1998; 98US-0078866P.
XX 20-MAR-1998; 98US-0078939P.

PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079786P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080333P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 09-APR-1998; 98US-0081195P.
PR 15-APR-1998; 98US-0081838P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0084346P.
PR 29-APR-1998; 98US-0084399P.
PR 29-APR-1998; 98US-0084414P.
PR 05-MAY-1998; 98US-0084366P.
PR 05-MAY-1998; 98US-0084367P.
PR 06-MAY-1998; 98US-0084414P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085700P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087208P.
PR 02-JUN-1998; 98US-0087609P.
PR 02-JUN-1998; 98US-0087759P.
PR 03-JUN-1998; 98US-0087827P.
PR 04-JUN-1998; 98US-0088025P.
PR 04-JUN-1998; 98US-0088028P.
PR 04-JUN-1998; 98US-0088029P.
PR 04-JUN-1998; 98US-0088033P.
PR 04-JUN-1998; 98US-0088326P.
PR 05-JUN-1998; 98US-0088167P.
PR 05-JUN-1998; 98US-0088202P.
PR 05-JUN-1998; 98US-0088212P.
PR 05-JUN-1998; 98US-0088217P.
PR 09-JUN-1998; 98US-0088655P.
PR 10-JUN-1998; 98US-0088722P.
PR 10-JUN-1998; 98US-0088738P.
PR 10-JUN-1998; 98US-0088740P.
PR 10-JUN-1998; 98US-0088811P.
PR 10-JUN-1998; 98US-0088824P.
PR 10-JUN-1998; 98US-0088825P.
PR 10-JUN-1998; 98US-0088826P.
PR 11-JUN-1998; 98US-0088861P.
PR 11-JUN-1998; 98US-0088863P.
PR 11-JUN-1998; 98US-0088876P.
PR 12-JUN-1998; 98US-0089090P.
PR 12-JUN-1998; 98US-0089105P.
PR 16-JUN-1998; 98US-0089512P.
PR 16-JUN-1998; 98US-0089514P.
PR 17-JUN-1998; 98US-0089538P.
PR 17-JUN-1998; 98US-0089582P.
PR 17-JUN-1998; 98US-0089653P.
PR 18-JUN-1998; 98US-0089908P.
PR 19-JUN-1998; 98US-0089952P.
PR 22-JUN-1998; 98US-0090246P.
PR 22-JUN-1998; 98US-0090252P.
PR 22-JUN-1998; 98US-0090254P.
PR 22-JUN-1998; 98US-0090429P.
PR 24-JUN-1998; 98US-0090435P.
PR 24-JUN-1998; 98US-0090444P.
PR 24-JUN-1998; 98US-0090461P.
PR 24-JUN-1998; 98US-0090535P.

PR 24-JUN-1998; 98US-0090540P.
 PR 25-JUN-1998; 98US-0090676P.
 PR 25-JUN-1998; 98US-0090678P.
 PR 25-JUN-1998; 98US-0090688P.
 PR 25-JUN-1998; 98US-0090690P.
 PR 25-JUN-1998; 98US-0090694P.
 PR 25-JUN-1998; 98US-0090695P.
 PR 25-JUN-1998; 98US-0090696P.
 PR 26-JUN-1998; 98US-0010541P.
 PR 26-JUN-1998; 98US-0090862P.
 PR 26-JUN-1998; 98US-0090863P.
 PR 26-JUN-1998; 98US-0091010P.
 PR 01-JUL-1998; 98US-0091359P.
 PR 01-JUL-1998; 98US-0091544P.
 PR 02-JUL-1998; 98US-0091478P.
 PR 02-JUL-1998; 98US-0091486P.
 PR 02-JUL-1998; 98US-0091626P.
 PR 02-JUL-1998; 98US-0091628P.
 PR 02-JUL-1998; 98US-0091632P.
 PR 24-JUL-1998; 98US-0094006P.
 PR 04-AUG-1998; 98US-0095822P.
 PR 10-AUG-1998; 98US-0095988P.
 PR 10-AUG-1998; 98US-0096012P.
 PR 17-AUG-1998; 98US-0096757P.
 PR 17-AUG-1998; 98US-0096766P.
 PR 17-AUG-1998; 98US-0096867P.
 PR 17-AUG-1998; 98US-0096891P.
 PR 17-AUG-1998; 98US-0096897P.
 PR 18-AUG-1998; 98US-0096949P.
 PR 18-AUG-1998; 98US-0096959P.
 PR 18-AUG-1998; 98US-0097022P.
 PR 26-AUG-1998; 98US-0097952P.
 PR 26-AUG-1998; 98US-0097955P.
 PR 26-AUG-1998; 98US-0097971P.
 PR 26-AUG-1998; 98US-0097974P.
 PR 26-AUG-1998; 98US-0098014P.
 PR 01-SEP-1998; 98US-0098716P.
 PR 01-SEP-1998; 98US-0098723P.
 PR 02-SEP-1998; 98US-0098803P.
 PR 02-SEP-1998; 98US-0098821P.
 PR 02-SEP-1998; 98US-0098843P.
 PR 09-SEP-1998; 98US-0098602P.
 PR 10-SEP-1998; 98US-0099741P.
 PR 10-SEP-1998; 98US-0099754P.
 PR 10-SEP-1998; 98US-0099763P.
 PR 10-SEP-1998; 98US-0099812P.
 PR 15-SEP-1998; 98US-0100388P.
 PR 16-SEP-1998; 98US-0100562P.
 PR 16-SEP-1998; 98US-0100564P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 16-SEP-1998; 98US-0101933P.
 PR 17-SEP-1998; 98US-0100683P.
 PR 17-SEP-1998; 98US-0100684P.
 PR 17-SEP-1998; 98US-0100919P.
 PR 17-SEP-1998; 98US-0100930P.
 PR 18-SEP-1998; 98US-0100849P.
 PR 18-SEP-1998; 98US-0101014P.
 PR 18-SEP-1998; 98US-0101068P.
 PR 23-SEP-1998; 98US-0101471P.
 PR 23-SEP-1998; 98US-0101472P.
 PR 23-SEP-1998; 98US-0101475P.
 PR 23-SEP-1998; 98US-0101477P.
 PR 24-SEP-1998; 98US-0101736P.
 PR 24-SEP-1998; 98US-0101739P.
 PR 24-SEP-1998; 98US-0101743P.
 PR 24-SEP-1998; 98US-0101922P.
 PR 25-SEP-1998; 98US-0101786P.
 PR 29-SEP-1998; 98US-0102207P.
 PR 29-SEP-1998; 98US-0102240P.
 PR 29-SEP-1998; 98US-0102330P.
 PR 29-SEP-1998; 98US-0102331P.
 PR 30-SEP-1998; 98US-0102487P.

PR 30-SEP-1998; 98US-0102570P.
 PR 30-SEP-1998; 98US-0102571P.
 PR 01-OCT-1998; 98US-0102684P.
 PR 01-OCT-1998; 98US-0102687P.

Query Match 99.8%; Score 1843; DB 6; Length 348;
 Best Local Similarity 99.7%; Pred. No. 4.5e-169; Indels 0; Gaps 0;
 Matches 347; Conservative 1; Mismatches 0;

QY 1 MLCPRFANLGLLITLITFLVAEAGAPNNLSLQTSKXNLAASSLSICMDEKQITON 60
 DB 1 MLCPRFANLGLLITLITFLVAEAGAPNNLSLQTSKXNLAASSLSICMDEKQITON 60
 QY 61 YSKYLAENVTSWVYKATNVALCCPPLALNLIITWEIILRQPSCTAYRRETEYKE 120
 DB 61 YSKYLAENVTSWVYKATNVALCCPPLALNLIITWEIILRQPSCTAYRRETEYKE 120
 QY 121 TNCIDERITWSSRPDQNSDLQIRPVAITHDGYRCIMVTPDGFHNGYHLQVLVTEVTL 180
 DB 121 TNCIDERITWSSRPDQNSDLQIRPVAITHDGYRCIMVTPDGFHNGYHLQVLVTEVTL 180
 QY 181 FQNRNRTAVCKAVAGKPAQISWIPGDCATKQETNSNGTVYKSTCHMEVHNVSTYTC 240
 DB 181 FQNRNRTAVCKAVAGKPAQISWIPGDCATKQETNSNGTVYKSTCHMEVHNVSTYTC 240
 QY 241 VSHLTGKSLYIELLPYGAKKSAKLYPIIILITLITVGFIMLKVNGCKRYLTKT 300
 DB 241 VSHLTGKSLYIELLPYGAKKSAKLYPIIILITLITVGFIMLKVNGCKRYLTKT 300
 QY 301 ESTPVEBEDMOPAYSTEKNPLDYTNKVKASQALQSEVDYDHTL 348
 DB 301 ESTPVEBEDMOPAYSTEKNPLDYTNKVKASQALQSEVDYDHTL 348

RESULT 9
 ABR65773
 ID ABR65773 standard; protein; 348 AA.
 XX
 AC ABR65773;
 XX
 DT 05-AUG-2003 (first entry)
 XX
 DE Human secreted polypeptide PRO6015, SEQ ID NO:494.
 XX
 XX Human; PRO; secreted protein; transmembrane protein;
 KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
 KW chondrocyte; proliferation; differentiation; cartilage disorder;
 KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
 KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
 KW liver; drug screening; transgenic animal; genetic analysis;
 KW antiarthritic; vulnerary; gene therapy.
 XX
 OS Homo sapiens.
 XX
 FN US2003036159-A1.
 XX
 PD 20-FEB-2003.
 XX
 XX 02-JUL-2002; 2002US-00186773.
 XX
 XX 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 17-OCT-1997; 97US-0062250P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 28-OCT-1997; 97US-0063540P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 28-OCT-1997; 97US-0063564P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 31-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064103P.

PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066120P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066772P.
PR 11-DEC-1997; 97US-0069335P.
PR 12-DEC-1997; 97US-0069425P.
PR 17-DEC-1997; 97US-0069870P.
PR 18-DEC-1997; 97US-0068017P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077649P.
PR 20-MAR-1998; 98US-0079886P.
PR 20-MAR-1998; 98US-0079939P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079786P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080333P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 09-APR-1998; 98US-0081195P.
PR 15-APR-1998; 98US-0081838P.
PR 21-APR-1998; 98US-0082568P.
PR 21-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083559P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085700P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087208P.
PR 02-JUN-1998; 98US-0087759P.
PR 03-JUN-1998; 98US-0087827P.
PR 04-JUN-1998; 98US-0088025P.
PR 04-JUN-1998; 98US-0088028P.
PR 04-JUN-1998; 98US-0088029P.
PR 04-JUN-1998; 98US-0088033P.
PR 04-JUN-1998; 98US-0088326P.
PR 05-JUN-1998; 98US-0088167P.
PR 05-JUN-1998; 98US-0088202P.
PR 05-JUN-1998; 98US-0088202P.
PR 05-JUN-1998; 98US-0088217P.
PR 09-JUN-1998; 98US-0088655P.
PR 10-JUN-1998; 98US-0088722P.
PR 10-JUN-1998; 98US-0088736P.
PR 10-JUN-1998; 98US-0088740P.
PR 10-JUN-1998; 98US-0088811P.
PR 10-JUN-1998; 98US-0088824P.
PR 10-JUN-1998; 98US-0088825P.
PR 10-JUN-1998; 98US-0088826P.
PR 11-JUN-1998; 98US-0088861P.
PR 11-JUN-1998; 98US-0088863P.
PR 11-JUN-1998; 98US-0088876P.
PR 12-JUN-1998; 98US-0089090P.
PR 12-JUN-1998; 98US-0089105P.
PR 16-JUN-1998; 98US-0089512P.
PR 16-JUN-1998; 98US-0089514P.

PR 17-JUN-1998; 98US-0089538P.
PR 17-JUN-1998; 98US-0089598P.
PR 17-JUN-1998; 98US-0089653P.
PR 18-JUN-1998; 98US-0089908P.
PR 19-JUN-1998; 98US-0089952P.
PR 22-JUN-1998; 98US-0090246P.
PR 22-JUN-1998; 98US-0090252P.
PR 22-JUN-1998; 98US-0090254P.
PR 24-JUN-1998; 98US-0090435P.
PR 24-JUN-1998; 98US-0090439P.
PR 24-JUN-1998; 98US-0090444P.
PR 24-JUN-1998; 98US-0090461P.
PR 24-JUN-1998; 98US-0090535P.
PR 24-JUN-1998; 98US-0090540P.
PR 24-JUN-1998; 98US-0090676P.
PR 25-JUN-1998; 98US-0090678P.
PR 25-JUN-1998; 98US-0090688P.
PR 25-JUN-1998; 98US-0090690P.
PR 25-JUN-1998; 98US-0090694P.
PR 25-JUN-1998; 98US-0090695P.
PR 25-JUN-1998; 98US-0090696P.
PR 26-JUN-1998; 98US-00105413.
PR 26-JUN-1998; 98US-0090862P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 01-JUL-1998; 98US-0091544P.
PR 02-JUL-1998; 98US-0091478P.
PR 02-JUL-1998; 98US-0091486P.
PR 02-JUL-1998; 98US-0091626P.
PR 02-JUL-1998; 98US-0091628P.
PR 02-JUL-1998; 98US-0091632P.
PR 24-JUL-1998; 98US-0094006P.
PR 04-AUG-1998; 98US-0095282P.
PR 10-AUG-1998; 98US-0095988P.
PR 10-AUG-1998; 98US-0096012P.
PR 17-AUG-1998; 98US-0096757P.
PR 17-AUG-1998; 98US-0096766P.
PR 17-AUG-1998; 98US-0096867P.
PR 17-AUG-1998; 98US-0096891P.
PR 17-AUG-1998; 98US-0096897P.
PR 18-AUG-1998; 98US-0096949P.
PR 18-AUG-1998; 98US-0096959P.
PR 18-AUG-1998; 98US-0097022P.
PR 18-AUG-1998; 98US-0097952P.
PR 26-AUG-1998; 98US-0097954P.
PR 26-AUG-1998; 98US-0097955P.
PR 26-AUG-1998; 98US-0097971P.
PR 26-AUG-1998; 98US-0097974P.
PR 26-AUG-1998; 98US-0098014P.
PR 01-SEP-1998; 98US-0098716P.
PR 01-SEP-1998; 98US-0098723P.
PR 02-SEP-1998; 98US-0098803P.
PR 02-SEP-1998; 98US-0098821P.
PR 02-SEP-1998; 98US-0098843P.
PR 09-SEP-1998; 98US-0099602P.
PR 10-SEP-1998; 98US-0099741P.
PR 10-SEP-1998; 98US-0099754P.
PR 10-SEP-1998; 98US-0099763P.
PR 10-SEP-1998; 98US-0099812P.
PR 15-SEP-1998; 98US-0100388P.
PR 16-SEP-1998; 98US-0100662P.
PR 16-SEP-1998; 98US-0100664P.
PR 16-SEP-1998; 98US-0101751P.
PR 16-SEP-1998; 98US-0101751P.
PR 17-SEP-1998; 98US-0100683P.
PR 17-SEP-1998; 98US-0100684P.
PR 17-SEP-1998; 98US-0100919P.
PR 18-SEP-1998; 98US-0100930P.
PR 18-SEP-1998; 98US-0100849P.
PR 18-SEP-1998; 98US-0101014P.
PR 18-SEP-1998; 98US-0101068P.
PR 23-SEP-1998; 98US-0101471P.

PR 23-SEP-1998; 98US-0101472P.
PR 23-SEP-1998; 98US-0101475P.
PR 23-SEP-1998; 98US-0101477P.
PR 24-SEP-1998; 98US-0101738P.
PR 24-SEP-1998; 98US-0101739P.
PR 24-SEP-1998; 98US-0101743P.
PR 24-SEP-1998; 98US-0101922P.
PR 25-SEP-1998; 98US-0101786P.
PR 25-SEP-1998; 98US-0102207P.
PR 29-SEP-1998; 98US-0102240P.
PR 29-SEP-1998; 98US-0102330P.
PR 29-SEP-1998; 98US-0102331P.
PR 30-SEP-1998; 98US-0102487P.
PR 30-SEP-1998; 98US-0102570P.
PR 30-SEP-1998; 98US-0102571P.
PR 01-OCT-1998; 98US-0102684P.
PR 01-OCT-1998; 98US-0102687P.

Query Match 99.8%; Score 1843; DB 6; Length 348;
Best Local Similarity 99.7%; Pred. No. 4,5e-169;
Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCQPMRTALGILLITITFLVAAGAAQPNNSLMLQTSKKNHALASSLCMDKQITON 60
DB 1 MCQPMRTALGILLITITFLVAAGAAQPNNSLMLQTSKKNHALASSLCMDKQITON 60
QY 61 YSKVLAENVTSVPVKATNAVACCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
DB 61 YSKVLAENVTSVPVKATNAVACCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
QY 121 TNCQTERITWVSPRONSDLOIRPAVITHDGYRCIMTPGNGFRGHLOVLTPEVTL 180
DB 121 TNCQTERITWVSPRONSDLOIRPAVITHDGYRCIMTPGNGFRGHLOVLTPEVTL 180
QY 181 FQNRNRTAVCAKAVAGKPAQIAQISWIEPGCATKQETWNSGTVKSTCHMEVHNVSTVCH 240
DB 181 FQNRNRTAVCAKAVAGKPAQIAQISWIEPGCATKQETWNSGTVKSTCHMEVHNVSTVCH 240
QY 241 VSHLTGKNSLYTEILPVPKAKSAKLYIPYIIITITIVGFIMLVNCGCRKYNKT 300
DB 241 VSHLTGKNSLYTEILPVPKAKSAKLYIPYIIITITIVGFIMLVNCGCRKYNKT 300
QY 301 ESTPVEEDEMOPYASYTEKNPNLYDTTNKVASQALQSEVDTDLHTL 348
DB 301 ESTPVEEDEMOPYASYTEKNPNLYDTTNKVASQALQSEVDTDLHTL 348

RESULT 10

ABU9713
ID ABU9713 standard; protein; 348 AA.

XX AC ABU9713;

DT 09-AUG-2003 (first entry)

XX Human secreted/transmembrane protein (PRO) #247.

XX Human; secreted and transmembrane protein; PRO; TNF-alpha;

XX tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;

XX tissue typing.

OS Homo sapiens.

XX US2003040070-A1.

PD 27-FEB-2003.

PF 27-JUN-2002; 2002US-00184627.

XX 18-SEP-1997; 97US-0059263P.
XX 18-SEP-1997; 97US-0059266P.
XX 17-OCT-1997; 97US-0062250P.
XX 21-OCT-1997; 97US-0063486P.

PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 28-OCT-1997; 97US-0063540P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063544P.
PR 28-OCT-1997; 97US-0063564P.
PR 29-OCT-1997; 97US-0063734P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066120P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066772P.
PR 11-DEC-1997; 97US-0069335P.
PR 12-DEC-1997; 97US-0069425P.
PR 17-DEC-1997; 97US-0069870P.
PR 18-DEC-1997; 97US-0068017P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 20-MAR-1998; 98US-0078886P.
PR 20-MAR-1998; 98US-0078939P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079786P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080333P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.
PR 09-APR-1998; 98US-0081195P.
PR 15-APR-1998; 98US-0081838P.
PR 21-APR-1998; 98US-0082568P.
PR 22-APR-1998; 98US-0082569P.
PR 22-APR-1998; 98US-0082704P.
PR 28-APR-1998; 98US-0082797P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083559P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085700P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087208P.
PR 02-JUN-1998; 98US-0087609P.
PR 02-JUN-1998; 98US-0087759P.
PR 03-JUN-1998; 98US-0087827P.
PR 04-JUN-1998; 98US-0088025P.
PR 04-JUN-1998; 98US-0088028P.
PR 04-JUN-1998; 98US-0088029P.
PR 04-JUN-1998; 98US-0088033P.
PR 04-JUN-1998; 98US-0088366P.
PR 05-JUN-1998; 98US-0088167P.
PR 05-JUN-1998; 98US-0088202P.
PR 05-JUN-1998; 98US-0088212P.
PR 05-JUN-1998; 98US-0088217P.
PR 09-JUN-1998; 98US-0088555P.
PR 10-JUN-1998; 98US-0088722P.
PR 10-JUN-1998; 98US-0088738P.
PR 10-JUN-1998; 98US-0088740P.
PR 10-JUN-1998; 98US-0088811P.
PR 10-JUN-1998; 98US-0088824P.


```

PR 10-JUN-1998; 98US-0088825P.
PR 10-JUN-1998; 98US-0088826P.
PR 11-JUN-1998; 98US-0088861P.
PR 11-JUN-1998; 98US-0088863P.
PR 11-JUN-1998; 98US-0088876P.
PR 12-JUN-1998; 98US-0089090P.
PR 12-JUN-1998; 98US-0089105P.
PR 16-JUN-1998; 98US-0089512P.
PR 16-JUN-1998; 98US-0089514P.
PR 17-JUN-1998; 98US-0089538P.
PR 17-JUN-1998; 98US-0089598P.
PR 18-JUN-1998; 98US-0089653P.
PR 19-JUN-1998; 98US-0089680P.
PR 19-JUN-1998; 98US-0089952P.
PR 22-JUN-1998; 98US-0090246P.
PR 22-JUN-1998; 98US-0090252P.
PR 22-JUN-1998; 98US-0090254P.
PR 24-JUN-1998; 98US-0090429P.
PR 24-JUN-1998; 98US-0090435P.
PR 24-JUN-1998; 98US-0090444P.
PR 24-JUN-1998; 98US-0090535P.
PR 24-JUN-1998; 98US-0090540P.
PR 25-JUN-1998; 98US-0090676P.
PR 25-JUN-1998; 98US-0090688P.
PR 25-JUN-1998; 98US-0090690P.
PR 25-JUN-1998; 98US-0090694P.
PR 25-JUN-1998; 98US-0090695P.
PR 26-JUN-1998; 98US-0090696P.
PR 26-JUN-1998; 98US-00105413.
PR 26-JUN-1998; 98US-0090862P.
PR 26-JUN-1998; 98US-0090863P.
PR 26-JUN-1998; 98US-0091010P.
PR 01-JUL-1998; 98US-0091359P.
PR 01-JUL-1998; 98US-0091544P.
PR 02-JUL-1998; 98US-0091478P.
PR 02-JUL-1998; 98US-0091486P.
PR 02-JUL-1998; 98US-0091626P.
PR 02-JUL-1998; 98US-0091628P.
PR 02-JUL-1998; 98US-0091632P.
PR 24-JUL-1998; 98US-0094006P.
PR 04-AUG-1998; 98US-0095282P.
PR 10-AUG-1998; 98US-0095988P.
PR 10-AUG-1998; 98US-0096012P.
PR 17-AUG-1998; 98US-0096757P.
PR 17-AUG-1998; 98US-0096766P.
PR 17-AUG-1998; 98US-0096867P.
PR 17-AUG-1998; 98US-0096891P.
PR 18-AUG-1998; 98US-0096897P.
PR 18-AUG-1998; 98US-0096949P.
PR 18-AUG-1998; 98US-0096959P.
PR 26-AUG-1998; 98US-0097022P.
PR 26-AUG-1998; 98US-0097952P.
PR 26-AUG-1998; 98US-0097954P.
PR 26-AUG-1998; 98US-0097955P.
PR 26-AUG-1998; 98US-0097971P.
PR 26-AUG-1998; 98US-0097974P.
PR 26-AUG-1998; 98US-0098014P.
PR 01-SEP-1998; 98US-0098166P.
PR 01-SEP-1998; 98US-0098723P.
PR 02-SEP-1998; 98US-0098803P.
PR 02-SEP-1998; 98US-0098821P.
PR 02-SEP-1998; 98US-0098843P.
PR 09-SEP-1998; 98US-0098602P.
PR 10-SEP-1998; 98US-0099741P.
PR 10-SEP-1998; 98US-0099754P.
PR 10-SEP-1998; 98US-0099763P.
PR 15-SEP-1998; 98US-0099812P.
PR 15-SEP-1998; 98US-0100388P.
PR 16-SEP-1998; 98US-0100662P.
PR 16-SEP-1998; 98US-0100664P.
PR 16-SEP-1998; 98US-0101751P.

```

```

PR 16-SEP-1998; 98WC-US019330.
PR 17-SEP-1998; 98US-0100683P.
PR 17-SEP-1998; 98US-0100684P.
PR 17-SEP-1998; 98US-0100919P.
PR 17-SEP-1998; 98US-0100930P.
PR 18-SEP-1998; 98US-0100849P.
PR 18-SEP-1998; 98US-0101014P.
PR 18-SEP-1998; 98US-0101068P.
PR 23-SEP-1998; 98US-0101471P.
PR 23-SEP-1998; 98US-0101472P.
PR 23-SEP-1998; 98US-0101475P.
PR 23-SEP-1998; 98US-0101738P.
PR 24-SEP-1998; 98US-0101739P.
PR 24-SEP-1998; 98US-0101743P.
PR 24-SEP-1998; 98US-0101922P.
PR 25-SEP-1998; 98US-010186P.
PR 25-SEP-1998; 98US-010207P.
PR 29-SEP-1998; 98US-0102207P.
PR 29-SEP-1998; 98US-0102240P.
PR 29-SEP-1998; 98US-0102330P.
PR 30-SEP-1998; 98US-0102331P.
PR 30-SEP-1998; 98US-0102487P.
PR 30-SEP-1998; 98US-0102570P.
PR 30-SEP-1998; 98US-0102571P.
PR 01-OCT-1998; 98US-0102684P.
PR 01-OCT-1998; 98US-0102687P.
PR 02-OCT-1998; 98US-0102687P.
PR 06-OCT-1998; 98US-0103258P.
PR 06-OCT-1998; 98US-0103258P.
PR 07-OCT-1998; 98US-00168978.

```

Query Match 99.8%; Score 1843; DB 6; Length 348;
 Best Local Similarity 99.7%; Pred. No. 4,5e-169;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 MLCPTATNLGLITITIFLVAEAGAPNNLSIMQSKENHALASSSLCMEDEKION 60
DB 1 MLCPTATNLGLITITIFLVAEAGAPNNLSIMQSKENHALASSSLCMEDEKION 60
QY 61 YSKVLAENVTSWPKATNAVACCPIALRNLIITWEIILRGPSCTKAYKEINETKE 120
DB 61 YSKVLAENVTSWPKATNAVACCPIALRNLIITWEIILRGPSCTKAYKEINETKE 120
QY 121 TNCEDRITWVSRRPDNSDQIRPVAITHDGYRCIMVTPDGNFRHGYLQVLYPEVTL 180
DB 121 TNCEDRITWVSRRPDNSDQIRPVAITHDGYRCIMVTPDGNFRHGYLQVLYPEVTL 180
QY 181 FQNRKTAVCCKAVAGAPPAQISMIPEGDCATKQZYMSNGTVKSTCHEVHNVSTVTC 240
DB 181 FQNRKTAVCCKAVAGAPPAQISMIPEGDCATKQZYMSNGTVKSTCHEVHNVSTVTC 240
QY 241 VSHLTGNKSLYIELLPVPGAKTSAKLYIYIIITIIITIVGFIWLKNGCRKTKLNT 300
DB 241 VSHLTGNKSLYIELLPVPGAKTSAKLYIYIIITIIITIVGFIWLKNGCRKTKLNT 300
QY 301 ESTPVVEDEMOQPYASTYKNNPLVDITNKVKAQSOLQSEVDTDLHTL 348
DB 301 ESTPVVEDEMOQPYASTYKNNPLVDITNKVKAQSOLQSEVDTDLHTL 348

```

RESULT 11

ABU82952 standard; protein; 348 AA.

```

XX AC ABU82952;
XX XX 27-JUN-2003 (first entry)
XX XX Human PRO polypeptide #247.
XX DE Human PRO polypeptide; secreted and transmembrane protein; tumour;
XX KW chromosome mapping; gene mapping; cytosolic.
XX XX

```

OS Homo sapiens.
 XX
 PN US2003032113-A1.
 XX
 PD 13-FEB-2003.
 XX
 PF 20-JUN-2002; 2002US-00176911.
 XX
 XX 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 17-OCT-1997; 97US-0062250P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 28-OCT-1997; 97US-006340P.
 PR 28-OCT-1997; 97US-0063541P.
 PR 28-OCT-1997; 97US-0063544P.
 PR 29-OCT-1997; 97US-0063564P.
 PR 31-OCT-1997; 97US-0063734P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 13-NOV-1997; 97US-006511P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 11-DEC-1997; 97US-0069335P.
 PR 12-DEC-1997; 97US-0069425P.
 PR 17-DEC-1997; 97US-0069870P.
 PR 18-DEC-1997; 97US-0068017P.
 PR 10-MAR-1998; 98US-0077450P.
 PR 11-MAR-1998; 98US-0077632P.
 PR 11-MAR-1998; 98US-0077649P.
 PR 20-MAR-1998; 98US-0078886P.
 PR 20-MAR-1998; 98US-0078939P.
 PR 27-MAR-1998; 98US-0079664P.
 PR 27-MAR-1998; 98US-0079786P.
 PR 31-MAR-1998; 98US-0080107P.
 PR 31-MAR-1998; 98US-0080194P.
 PR 01-APR-1998; 98US-0080327P.
 PR 01-APR-1998; 98US-0080333P.
 PR 08-APR-1998; 98US-0081049P.
 PR 08-APR-1998; 98US-0081070P.
 PR 09-APR-1998; 98US-0081195P.
 PR 15-APR-1998; 98US-0081838P.
 PR 21-APR-1998; 98US-0082568P.
 PR 21-APR-1998; 98US-0082569P.
 PR 22-APR-1998; 98US-0082704P.
 PR 22-APR-1998; 98US-0082797P.
 PR 28-APR-1998; 98US-0083122P.
 PR 29-APR-1998; 98US-0083195P.
 PR 29-APR-1998; 98US-0083496P.
 PR 29-APR-1998; 98US-0083499P.
 PR 29-APR-1998; 98US-0083559P.
 PR 05-MAY-1998; 98US-0084366P.
 PR 06-MAY-1998; 98US-0084414P.
 PR 07-MAY-1998; 98US-0084439P.
 PR 07-MAY-1998; 98US-0084640P.
 PR 07-MAY-1998; 98US-0084643P.
 PR 15-MAY-1998; 98US-0085579P.
 PR 15-MAY-1998; 98US-0085580P.
 PR 15-MAY-1998; 98US-0085582P.
 PR 15-MAY-1998; 98US-0085700P.
 PR 18-MAY-1998; 98US-0086023P.
 PR 22-MAY-1998; 98US-0086392P.
 PR 22-MAY-1998; 98US-0086486P.
 PR 28-MAY-1998; 98US-0087098P.
 PR 28-MAY-1998; 98US-0087208P.
 PR 02-JUN-1998; 98US-0087609P.
 PR 02-JUN-1998; 98US-0087759P.
 PR 03-JUN-1998; 98US-0087827P.
 PR 04-JUN-1998; 98US-0088025P.
 PR 04-JUN-1998; 98US-0088028P.
 PR 04-JUN-1998; 98US-0088029P.

PR 04-JUN-1998; 98US-0088033P.
 PR 04-JUN-1998; 98US-0088326P.
 PR 05-JUN-1998; 98US-0088167P.
 PR 05-JUN-1998; 98US-0088202P.
 PR 05-JUN-1998; 98US-0088212P.
 PR 05-JUN-1998; 98US-0088217P.
 PR 09-JUN-1998; 98US-0088555P.
 PR 10-JUN-1998; 98US-0088722P.
 PR 10-JUN-1998; 98US-0088738P.
 PR 10-JUN-1998; 98US-0088740P.
 PR 10-JUN-1998; 98US-0088811P.
 PR 10-JUN-1998; 98US-0088824P.
 PR 10-JUN-1998; 98US-0088825P.
 PR 10-JUN-1998; 98US-0088826P.
 PR 11-JUN-1998; 98US-0088861P.
 PR 11-JUN-1998; 98US-0088863P.
 PR 11-JUN-1998; 98US-0088876P.
 PR 12-JUN-1998; 98US-0089030P.
 PR 12-JUN-1998; 98US-0089105P.
 PR 16-JUN-1998; 98US-0089512P.
 PR 16-JUN-1998; 98US-0089544P.
 PR 17-JUN-1998; 98US-0089538P.
 PR 17-JUN-1998; 98US-0089598P.
 PR 17-JUN-1998; 98US-0089653P.
 PR 18-JUN-1998; 98US-0089908P.
 PR 19-JUN-1998; 98US-0089952P.
 PR 22-JUN-1998; 98US-0090246P.
 PR 22-JUN-1998; 98US-0090252P.
 PR 22-JUN-1998; 98US-0090254P.
 PR 24-JUN-1998; 98US-0090435P.
 PR 24-JUN-1998; 98US-0090439P.
 PR 24-JUN-1998; 98US-0090444P.
 PR 24-JUN-1998; 98US-0090461P.
 PR 24-JUN-1998; 98US-0090553P.
 PR 24-JUN-1998; 98US-0090559P.
 PR 25-JUN-1998; 98US-0090616P.
 PR 25-JUN-1998; 98US-0090678P.
 PR 25-JUN-1998; 98US-0090688P.
 PR 25-JUN-1998; 98US-0090690P.
 PR 25-JUN-1998; 98US-0090694P.
 PR 25-JUN-1998; 98US-0090695P.
 PR 25-JUN-1998; 98US-0091486P.
 PR 26-JUN-1998; 98US-00105413.
 PR 26-JUN-1998; 98US-0090862P.
 PR 26-JUN-1998; 98US-0090863P.
 PR 26-JUN-1998; 98US-0091010P.
 PR 01-JUL-1998; 98US-0091359P.
 PR 01-JUL-1998; 98US-0091544P.
 PR 02-JUL-1998; 98US-0091478P.
 PR 02-JUL-1998; 98US-0091486P.
 PR 02-JUL-1998; 98US-0091626P.
 PR 02-JUL-1998; 98US-0091628P.
 PR 02-JUL-1998; 98US-0091632P.
 PR 02-JUL-1998; 98US-0091636P.
 PR 24-JUL-1998; 98US-0094006P.
 PR 04-AUG-1998; 98US-0095282P.
 PR 10-AUG-1998; 98US-0095998P.
 PR 10-AUG-1998; 98US-0096012P.
 PR 17-AUG-1998; 98US-0096757P.
 PR 17-AUG-1998; 98US-0096766P.
 PR 17-AUG-1998; 98US-0096867P.
 PR 17-AUG-1998; 98US-0096891P.
 PR 17-AUG-1998; 98US-0096897P.
 PR 18-AUG-1998; 98US-0096897P.
 PR 18-AUG-1998; 98US-0096949P.
 PR 18-AUG-1998; 98US-0096959P.
 PR 18-AUG-1998; 98US-0097032P.
 PR 26-AUG-1998; 98US-0097952P.
 PR 26-AUG-1998; 98US-0097954P.
 PR 26-AUG-1998; 98US-0097955P.
 PR 26-AUG-1998; 98US-0097971P.
 PR 26-AUG-1998; 98US-0097974P.
 PR 26-AUG-1998; 98US-0098014P.
 PR 01-SEP-1998; 98US-0098016P.
 PR 01-SEP-1998; 98US-0098723P.

```

PR 02-SEP-1998; 98US-0098803P.
PR 02-SEP-1998; 98US-0098821P.
PR 02-SEP-1998; 98US-0098843P.
PR 09-SEP-1998; 98US-0099602P.
PR 10-SEP-1998; 98US-0099741P.
PR 10-SEP-1998; 98US-0099754P.
PR 10-SEP-1998; 98US-0099763P.
PR 10-SEP-1998; 98US-0099812P.
PR 15-SEP-1998; 98US-0100388P.
PR 16-SEP-1998; 98US-0100652P.
PR 16-SEP-1998; 98US-0100664P.
PR 16-SEP-1998; 98US-0101751P.
PR 16-SEP-1998; 98US-0101751P.
PR 17-SEP-1998; 98US-0100683P.
PR 17-SEP-1998; 98US-0100684P.
PR 17-SEP-1998; 98US-0100913P.
PR 17-SEP-1998; 98US-0100930P.
PR 18-SEP-1998; 98US-0100849P.
PR 18-SEP-1998; 98US-0101014P.
PR 18-SEP-1998; 98US-0101068P.
PR 23-SEP-1998; 98US-0101471P.
PR 23-SEP-1998; 98US-0101472P.
PR 23-SEP-1998; 98US-0101475P.
PR 23-SEP-1998; 98US-0101477P.
PR 24-SEP-1998; 98US-0101738P.
PR 24-SEP-1998; 98US-0101739P.
PR 24-SEP-1998; 98US-0101743P.
PR 24-SEP-1998; 98US-0101922P.
PR 25-SEP-1998; 98US-0101786P.
PR 25-SEP-1998; 98US-0102207P.
PR 29-SEP-1998; 98US-0102240P.
PR 29-SEP-1998; 98US-0102330P.
PR 29-SEP-1998; 98US-0102331P.
PR 30-SEP-1998; 98US-0102487P.
PR 30-SEP-1998; 98US-0102570P.
PR 30-SEP-1998; 98US-0102571P.
PR 01-OCT-1998; 98US-0102684P.
PR 01-OCT-1998; 98US-0102687P.
PR 02-OCT-1998; 98US-0102965P.
PR 06-OCT-1998; 98US-0103258P.
PR 06-OCT-1998; 98US-0103449P.
PR 07-OCT-1998; 98US-0106897P.
PR 07-OCT-1998; 98US-0103395P.

```

Query Match 99.8%; Score 1843; DB 6; Length 348;
 Best Local Similarity 99.7%; Pred. No. 4,5e-169;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

```

QY 1 MLCPRNTNLGILLITITFLVAEAGAAQPNNSLMLQTSKENHALLASSSLCMEDEKQITON 60
DB 1 MLCPRNTNLGILLITITFLVAEAGAAQPNNSLMLQTSKENHALLASSSLCMEDEKQITON 60
QY 61 YSKVLAENVTSVPVMAATNAVLCPPILAKNLIITWIIIRGQDSCYAKRKETNETKE 120
DB 61 YSKVLAENVTSVPVMAATNAVLCPPILAKNLIITWIIIRGQDSCYAKRKETNETKE 120
QY 121 TNCEDERTITWSPONSDLOIRPAVITHDGYRCIMVTPDGNFRGYHLQVLTPEVTL 180
DB 121 TNCEDERTITWSPONSDLOIRPAVITHDGYRCIMVTPDGNFRGYHLQVLTPEVTL 180
QY 181 FQNNRRTAVCAVAGKPAQAQISWIEBQCATKQZWSNGVTVVSTCMEVHANVSTYCH 240
DB 181 FQNNRRTAVCAVAGKPAQAQISWIEBQCATKQZWSNGVTVVSTCMEVHANVSTYCH 240
QY 241 VSHLGNKSLYELLFPVPGAKKSAKLYIPYIITITITIVGFVILKVNCRKXKYNKT 300
DB 241 VSHLGNKSLYELLFPVPGAKKSAKLYIPYIITITITIVGFVILKVNCRKXKYNKT 300
QY 301 ESTPVEEDEMOPVASYTEKNPNLYDTTNKVASQALQSEVDTDIHTL 348
DB 301 ESTPVEEDEMOPVASYTEKNPNLYDTTNKVASQALQSEVDTDIHTL 348

```

```

RESULT 12
ABUS0073
ID ABUS0073 standard; protein; 348 AA.
XX
XX ABUS0073;
AC
XX
XX 11-AUG-2003 (first entry)
DT
XX
XX Novel human secreted and transmembrane protein PRO6015.
DE
XX
XX Human; gene therapy; tissue typing; tumour; chondrocyte proliferation;
KM Chondrocyte differentiation; tumour necrosis factor-alpha release;
KW affinity purification.
XX
XX Homo sapiens.
XX
XX US2003036147-A1.
XX
XX 20-FEB-2003.
XX
XX 02-JUL-2002; 2002US-00187741.
XX
XX 18-SEP-1997; 97US-0059263P.
XX 18-SEP-1997; 97US-0059266P.
XX 17-OCT-1997; 97US-0062250P.
XX 21-OCT-1997; 97US-0063486P.
XX 24-OCT-1997; 97US-0063120P.
XX 24-OCT-1997; 97US-0063121P.
XX 24-OCT-1997; 97US-0063440P.
XX 28-OCT-1997; 97US-0063541P.
XX 28-OCT-1997; 97US-0063544P.
XX 28-OCT-1997; 97US-0063564P.
XX 28-OCT-1997; 97US-0063734P.
XX 29-OCT-1997; 97US-0063870P.
XX 31-OCT-1997; 97US-0064103P.
XX 13-NOV-1997; 97US-0065311P.
XX 21-NOV-1997; 97US-0066420P.
XX 24-NOV-1997; 97US-0066466P.
XX 24-NOV-1997; 97US-0066772P.
XX 11-DEC-1997; 97US-0069335P.
XX 11-DEC-1997; 97US-0069425P.
XX 17-DEC-1997; 97US-0069870P.
XX 18-DEC-1997; 97US-0068017P.
XX 10-MAR-1998; 98US-0077450P.
XX 11-MAR-1998; 98US-0077632P.
XX 11-MAR-1998; 98US-0077649P.
XX 20-MAR-1998; 98US-0078886P.
XX 20-MAR-1998; 98US-0078939P.
XX 27-MAR-1998; 98US-0079664P.
XX 27-MAR-1998; 98US-0079786P.
XX 31-MAR-1998; 98US-0080107P.
XX 31-MAR-1998; 98US-0080194P.
XX 01-APR-1998; 98US-0080327P.
XX 01-APR-1998; 98US-0080333P.
XX 08-APR-1998; 98US-0081049P.
XX 08-APR-1998; 98US-0081070P.
XX 09-APR-1998; 98US-0081195P.
XX 15-APR-1998; 98US-0081838P.
XX 21-APR-1998; 98US-0082568P.
XX 21-APR-1998; 98US-0082569P.
XX 22-APR-1998; 98US-0082704P.
XX 22-APR-1998; 98US-0082797P.
XX 28-APR-1998; 98US-0083422P.
XX 28-APR-1998; 98US-0083495P.
XX 29-APR-1998; 98US-0083496P.
XX 29-APR-1998; 98US-0083496P.
XX 29-APR-1998; 98US-0083559P.
XX 05-MAY-1998; 98US-0084366P.
XX 06-MAY-1998; 98US-0084414P.
XX 07-MAY-1998; 98US-0084639P.
XX 07-MAY-1998; 98US-0084640P.
XX 07-MAY-1998; 98US-0084643P.
XX 15-MAY-1998; 98US-0085579P.

```

PR	15-MAY-1998;	98US-0085580P.	PR	17-AUG-1998;	98US-0096867P.
PR	15-MAY-1998;	98US-0085582P.	PR	17-AUG-1998;	98US-0096891P.
PR	15-MAY-1998;	98US-0085700P.	PR	17-AUG-1998;	98US-0096897P.
PR	18-MAY-1998;	98US-0086023P.	PR	18-AUG-1998;	98US-0096949P.
PR	22-MAY-1998;	98US-0086392P.	PR	18-AUG-1998;	98US-0096959P.
PR	28-MAY-1998;	98US-0086486P.	PR	18-AUG-1998;	98US-0097022P.
PR	28-MAY-1998;	98US-0087098P.	PR	26-AUG-1998;	98US-0097952P.
PR	02-JUN-1998;	98US-0087208P.	PR	26-AUG-1998;	98US-0097954P.
PR	02-JUN-1998;	98US-0087609P.	PR	26-AUG-1998;	98US-0097955P.
PR	03-JUN-1998;	98US-0087759P.	PR	26-AUG-1998;	98US-0097971P.
PR	04-JUN-1998;	98US-0088227P.	PR	26-AUG-1998;	98US-0097974P.
PR	04-JUN-1998;	98US-0088235P.	PR	01-SEP-1998;	98US-0098014P.
PR	04-JUN-1998;	98US-0088028P.	PR	01-SEP-1998;	98US-0098716P.
PR	04-JUN-1998;	98US-0088029P.	PR	02-SEP-1998;	98US-0098723P.
PR	04-JUN-1998;	98US-0088033P.	PR	02-SEP-1998;	98US-0098803P.
PR	05-JUN-1998;	98US-0088326P.	PR	02-SEP-1998;	98US-0098821P.
PR	05-JUN-1998;	98US-0088367P.	PR	03-SEP-1998;	98US-0098843P.
PR	05-JUN-1998;	98US-0088302P.	PR	09-SEP-1998;	98US-0099602P.
PR	05-JUN-1998;	98US-0088212P.	PR	10-SEP-1998;	98US-0099741P.
PR	05-JUN-1998;	98US-0088217P.	PR	10-SEP-1998;	98US-0099741P.
PR	09-JUN-1998;	98US-0088655P.	PR	10-SEP-1998;	98US-0099754P.
PR	10-JUN-1998;	98US-0088722P.	PR	10-SEP-1998;	98US-0099763P.
PR	10-JUN-1998;	98US-0088738P.	PR	15-SEP-1998;	98US-0099812P.
PR	10-JUN-1998;	98US-0088740P.	PR	16-SEP-1998;	98US-0100388P.
PR	10-JUN-1998;	98US-0088811P.	PR	16-SEP-1998;	98US-0100662P.
PR	10-JUN-1998;	98US-0088824P.	PR	16-SEP-1998;	98US-0100664P.
PR	10-JUN-1998;	98US-0088825P.	PR	16-SEP-1998;	98US-0101751P.
PR	11-JUN-1998;	98US-0088826P.	PR	16-SEP-1998;	98US-0101751P.
PR	11-JUN-1998;	98US-0088861P.	PR	17-SEP-1998;	98US-0100663P.
PR	11-JUN-1998;	98US-0088863P.	PR	17-SEP-1998;	98US-0100684P.
PR	11-JUN-1998;	98US-0088876P.	PR	17-SEP-1998;	98US-0100919P.
PR	12-JUN-1998;	98US-0089090P.	PR	18-SEP-1998;	98US-0100930P.
PR	12-JUN-1998;	98US-00893105P.	PR	18-SEP-1998;	98US-0100849P.
PR	16-JUN-1998;	98US-0089512P.	PR	18-SEP-1998;	98US-0101014P.
PR	16-JUN-1998;	98US-0089514P.	PR	23-SEP-1998;	98US-0101068P.
PR	17-JUN-1998;	98US-0089538P.	PR	23-SEP-1998;	98US-0101471P.
PR	17-JUN-1998;	98US-0089598P.	PR	23-SEP-1998;	98US-0101472P.
PR	17-JUN-1998;	98US-0089633P.	PR	23-SEP-1998;	98US-0101475P.
PR	17-JUN-1998;	98US-0089653P.	PR	23-SEP-1998;	98US-0101477P.
PR	18-JUN-1998;	98US-0089908P.	PR	24-SEP-1998;	98US-0101738P.
PR	19-JUN-1998;	98US-0089952P.	PR	24-SEP-1998;	98US-0101739P.
PR	22-JUN-1998;	98US-0090246P.	PR	24-SEP-1998;	98US-0101743P.
PR	22-JUN-1998;	98US-0090252P.	PR	24-SEP-1998;	98US-0101922P.
PR	24-JUN-1998;	98US-0090254P.	PR	25-SEP-1998;	98US-0101786P.
PR	24-JUN-1998;	98US-0090429P.	PR	25-SEP-1998;	98US-0102207P.
PR	24-JUN-1998;	98US-0090435P.	PR	29-SEP-1998;	98US-0102240P.
PR	24-JUN-1998;	98US-0090444P.	PR	29-SEP-1998;	98US-0102330P.
PR	24-JUN-1998;	98US-0090461P.	PR	29-SEP-1998;	98US-0102331P.
PR	24-JUN-1998;	98US-0090535P.	PR	30-SEP-1998;	98US-0102467P.
PR	24-JUN-1998;	98US-0090540P.	PR	30-SEP-1998;	98US-0102570P.
PR	25-JUN-1998;	98US-0090676P.	PR	30-SEP-1998;	98US-0102571P.
PR	25-JUN-1998;	98US-0090678P.	PR	01-OCT-1998;	98US-0102684P.
PR	25-JUN-1998;	98US-0090680P.	PR	01-OCT-1998;	98US-0102687P.
PR	25-JUN-1998;	98US-0090689P.	PR	02-OCT-1998;	98US-0102965P.
PR	25-JUN-1998;	98US-0090694P.	PR	06-OCT-1998;	98US-0103258P.
PR	25-JUN-1998;	98US-0090695P.	PR	06-OCT-1998;	98US-0103469P.
PR	25-JUN-1998;	98US-0090696P.	PR	07-OCT-1998;	98US-00168978.
PR	26-JUN-1998;	98US-00105413.			
PR	26-JUN-1998;	98US-0090862P.			
PR	26-JUN-1998;	98US-0090863P.			
PR	26-JUN-1998;	98US-0091010P.			
PR	01-JUL-1998;	98US-0091359P.			
PR	01-JUL-1998;	98US-0091544P.			
PR	02-JUL-1998;	98US-0091478P.			
PR	02-JUL-1998;	98US-0091486P.			
PR	02-JUL-1998;	98US-0091626P.			
PR	02-JUL-1998;	98US-0091628P.			
PR	02-JUL-1998;	98US-0091632P.			
PR	24-JUL-1998;	98US-0094006P.			
PR	04-AUG-1998;	98US-0095282P.			
PR	10-AUG-1998;	98US-0095598P.			
PR	10-AUG-1998;	98US-0096012P.			
PR	17-AUG-1998;	98US-0096757P.			
PR	17-AUG-1998;	98US-0096766P.			
PR	17-AUG-1998;	98US-0096867P.			
PR	17-AUG-1998;	98US-0096891P.			
PR	17-AUG-1998;	98US-0096897P.			
PR	18-AUG-1998;	98US-0096949P.			
PR	18-AUG-1998;	98US-0096959P.			
PR	18-AUG-1998;	98US-0097022P.			
PR	26-AUG-1998;	98US-0097952P.			
PR	26-AUG-1998;	98US-0097954P.			
PR	26-AUG-1998;	98US-0097955P.			
PR	26-AUG-1998;	98US-0097971P.			
PR	26-AUG-1998;	98US-0097974P.			
PR	01-SEP-1998;	98US-0098014P.			
PR	01-SEP-1998;	98US-0098716P.			
PR	02-SEP-1998;	98US-0098723P.			
PR	02-SEP-1998;	98US-0098803P.			
PR	02-SEP-1998;	98US-0098821P.			
PR	03-SEP-1998;	98US-0098843P.			
PR	09-SEP-1998;	98US-0099602P.			
PR	10-SEP-1998;	98US-0099741P.			
PR	10-SEP-1998;	98US-0099741P.			
PR	10-SEP-1998;	98US-0099754P.			
PR	10-SEP-1998;	98US-0099763P.			
PR	15-SEP-1998;	98US-0099812P.			
PR	16-SEP-1998;	98US-0100388P.			
PR	16-SEP-1998;	98US-0100662P.			
PR	16-SEP-1998;	98US-0100664P.			
PR	16-SEP-1998;	98US-0101751P.			
PR	16-SEP-1998;	98US-0101751P.			
PR	17-SEP-1998;	98US-0100663P.			
PR	17-SEP-1998;	98US-0100684P.			
PR	17-SEP-1998;	98US-0100919P.			
PR	18-SEP-1998;	98US-0100930P.			
PR	18-SEP-1998;	98US-0100849P.			
PR	18-SEP-1998;	98US-0101014P.			
PR	23-SEP-1998;	98US-0101068P.			
PR	23-SEP-1998;	98US-0101471P.			
PR	23-SEP-1998;	98US-0101472P.			
PR	23-SEP-1998;	98US-0101475P.			
PR	23-SEP-1998;	98US-0101477P.			
PR	24-SEP-1998;	98US-0101738P.			
PR	24-SEP-1998;	98US-0101739P.			
PR	24-SEP-1998;	98US-0101743P.			
PR	24-SEP-1998;	98US-0101922P.			
PR	25-SEP-1998;	98US-0101786P.			
PR	25-SEP-1998;	98US-0102207P.			
PR	29-SEP-1998;	98US-0102240P.			
PR	29-SEP-1998;	98US-0102330P.			
PR	29-SEP-1998;	98US-0102331P.			
PR	30-SEP-1998;	98US-0102467P.			
PR	30-SEP-1998;	98US-0102570P.			
PR	30-SEP-1998;	98US-0102571P.			
PR	01-OCT-1998;	98US-0102684P.			
PR	01-OCT-1998;	98US-0102687P.			
PR	02-OCT-1998;	98US-0102965P.			
PR	06-OCT-1998;	98US-0103258P.			
PR	06-OCT-1998;	98US-0103469P.			
PR	07-OCT-1998;	98US-00168978.			
Query Match	99.8%;	Score 1843;	DB 6;	Length 348;	
Best Local Similarity	99.7%;	Pred. No. 4.5e-169;			
Matches 347;	Conservative 1;	Mismatches 0;	Indels 0;	Gaps 0;	
Cy	1	MLCPWRANLGLILITLIFVAEAGGAAOPNNIMOTSENNALASSSICMEKOTON	60		
Db	1	MLCPWRANLGLILITLIFVAEAGGAAOPNNIMOTSENNALASSSICMEKOTON	60		
Cy	61	YSKYLAEVNTSWPKYKATNAVLCPPYALNNLIITWEIILKQOPSCSTKAYREINETKE	120		
Db	61	YSKYLAEVNTSWPKYKATNAVLCPPYALNNLIITWEIILKQOPSCSTKAYREINETKE	120		
Cy	121	TNCTDERITWVSRPDQSDQIRPVATTHDGYRCIAVTFDGNFHHGYHJQVAVTPEVTL	180		
Db	121	TNCTDERITWVSRPDQSDQIRPVATTHDGYRCIAVTFDGNFHHGYHJQVAVTPEVTL	180		

```
QY 181 FGNRRRTAVCAKVAKPAQISNIEGDCATKQEVMSNGTAVTYSCTCHEVHNVSTVTC 240
DB 181 FGNRRRTAVCAKVAKPAQISNIEGDCATKQEVMSNGTAVTYSCTCHEVHNVSTVTC 240
QY 241 VSHLTGNKSLVTELLPVPQAKKSANLYPIYIILITITIVGFTWLLKNGCRKXKLNKT 300
DB 241 VSHLTGNKSLVTELLPVPQAKKSANLYPIYIILITITIVGFTWLLKNGCRKXKLNKT 300
QY 301 ESTPVEEDEMOPKSYTEKNKPLVDTTNKVKASQALQSEVDTDLHTL 348
DB 301 ESTPVEEDEMOPKSYTEKNKPLVDTTNKVKASQALQSEVDTDLHTL 348

RESULT 13
ABR68322
ID ABR68322 standard, protein, 348 AA.
XX
AC ABR68322;
XX
DT 11-AUG-2003 (first entry)
XX
DE Human secreted polypeptide PRO6015, SEQ ID NO:494.
XX
KW Human; PRO; secreted protein; transmembrane protein;
KW extracellular domain; tumour necrosis factor-alpha; TNF-alpha;
KW chondrocyte; proliferation; differentiation; cartilage disorder;
KW bone disorder; arthritis; sports injury; cancer; tumour; diagnosis;
KW adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix;
KW liver; drug screening; transgenic animal; genetic analysis;
KW antitubercular; veterinary; gene therapy.
XX
OS Homo sapiens.
XX
PN US2003027264-A1.
XX
PD 06-FEB-2003.
XX
PF 18-JUN-2002; 2002US-00174579.
XX
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 17-OCT-1997; 97US-0062250P.
PR 21-OCT-1997; 97US-0063486P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 28-OCT-1997; 97US-0063540P.
PR 28-OCT-1997; 97US-0063541P.
PR 28-OCT-1997; 97US-0063564P.
PR 28-OCT-1997; 97US-0063734P.
PR 29-OCT-1997; 97US-0063734P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066120P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066772P.
PR 11-DEC-1997; 97US-0068335P.
PR 12-DEC-1997; 97US-0068425P.
PR 17-DEC-1997; 97US-0068870P.
PR 18-DEC-1997; 97US-0068870P.
PR 10-MAR-1998; 98US-0077450P.
PR 11-MAR-1998; 98US-0077632P.
PR 11-MAR-1998; 98US-0077649P.
PR 20-MAR-1998; 98US-0078866P.
PR 20-MAR-1998; 98US-0078939P.
PR 27-MAR-1998; 98US-0079664P.
PR 27-MAR-1998; 98US-0079786P.
PR 31-MAR-1998; 98US-0080107P.
PR 31-MAR-1998; 98US-0080194P.
PR 01-APR-1998; 98US-0080327P.
PR 01-APR-1998; 98US-0080333P.
PR 08-APR-1998; 98US-0081049P.
PR 08-APR-1998; 98US-0081070P.

PR 09-APR-1998; 98US-0081195P.
PR 15-APR-1998; 98US-0081838P.
PR 21-APR-1998; 98US-0082568P.
PR 22-APR-1998; 98US-0082699P.
PR 22-APR-1998; 98US-0082704P.
PR 22-APR-1998; 98US-0082797P.
PR 28-APR-1998; 98US-0083322P.
PR 29-APR-1998; 98US-0083495P.
PR 29-APR-1998; 98US-0083496P.
PR 29-APR-1998; 98US-0083499P.
PR 29-APR-1998; 98US-0083559P.
PR 05-MAY-1998; 98US-0084366P.
PR 06-MAY-1998; 98US-0084414P.
PR 07-MAY-1998; 98US-0084639P.
PR 07-MAY-1998; 98US-0084640P.
PR 07-MAY-1998; 98US-0084643P.
PR 15-MAY-1998; 98US-0085579P.
PR 15-MAY-1998; 98US-0085580P.
PR 15-MAY-1998; 98US-0085582P.
PR 15-MAY-1998; 98US-0085700P.
PR 18-MAY-1998; 98US-0086023P.
PR 22-MAY-1998; 98US-0086392P.
PR 22-MAY-1998; 98US-0086486P.
PR 28-MAY-1998; 98US-0087098P.
PR 28-MAY-1998; 98US-0087208P.
PR 02-JUN-1998; 98US-0087609P.
PR 02-JUN-1998; 98US-0087759P.
PR 03-JUN-1998; 98US-0087827P.
PR 04-JUN-1998; 98US-0088025P.
PR 04-JUN-1998; 98US-0088028P.
PR 04-JUN-1998; 98US-0088029P.
PR 04-JUN-1998; 98US-0088033P.
PR 04-JUN-1998; 98US-0088326P.
PR 05-JUN-1998; 98US-0088167P.
PR 05-JUN-1998; 98US-0088202P.
PR 05-JUN-1998; 98US-0088212P.
PR 05-JUN-1998; 98US-0088217P.
PR 09-JUN-1998; 98US-0088655P.
PR 10-JUN-1998; 98US-0088722P.
PR 10-JUN-1998; 98US-0088738P.
PR 10-JUN-1998; 98US-0088740P.
PR 10-JUN-1998; 98US-0088811P.
PR 10-JUN-1998; 98US-0088824P.
PR 10-JUN-1998; 98US-0088825P.
PR 10-JUN-1998; 98US-0088826P.
PR 11-JUN-1998; 98US-0088861P.
PR 11-JUN-1998; 98US-0088863P.
PR 11-JUN-1998; 98US-0088876P.
PR 17-JUN-1998; 98US-0089598P.
PR 17-JUN-1998; 98US-0089653P.
PR 18-JUN-1998; 98US-0089908P.
PR 19-JUN-1998; 98US-0089952P.
PR 22-JUN-1998; 98US-0090246P.
PR 22-JUN-1998; 98US-0090252P.
PR 22-JUN-1998; 98US-0090254P.
PR 24-JUN-1998; 98US-0090429P.
PR 24-JUN-1998; 98US-0090435P.
PR 24-JUN-1998; 98US-0090444P.
PR 24-JUN-1998; 98US-0090461P.
PR 24-JUN-1998; 98US-0090535P.
PR 24-JUN-1998; 98US-0090540P.
PR 25-JUN-1998; 98US-0090678P.
PR 25-JUN-1998; 98US-0090688P.
PR 25-JUN-1998; 98US-0090690P.
PR 25-JUN-1998; 98US-0090694P.
PR 25-JUN-1998; 98US-0090695P.
PR 25-JUN-1998; 98US-0090696P.
```


PR 20-MAR-1998; 98US-0078886P.
 PR 20-MAR-1998; 98US-0078939P.
 PR 27-MAR-1998; 98US-0079664P.
 PR 27-MAR-1998; 98US-0079786P.
 PR 31-MAR-1998; 98US-0080107P.
 PR 31-MAR-1998; 98US-0080194P.
 PR 01-APR-1998; 98US-0080327P.
 PR 01-APR-1998; 98US-0080333P.
 PR 08-APR-1998; 98US-0081049P.
 PR 08-APR-1998; 98US-0081070P.
 PR 09-APR-1998; 98US-0081195P.
 PR 15-APR-1998; 98US-0081838P.
 PR 21-APR-1998; 98US-0082568P.
 PR 22-APR-1998; 98US-0082569P.
 PR 22-APR-1998; 98US-0082704P.
 PR 28-APR-1998; 98US-0082797P.
 PR 29-APR-1998; 98US-0083322P.
 PR 29-APR-1998; 98US-0083495P.
 PR 29-APR-1998; 98US-0083496P.
 PR 29-APR-1998; 98US-0083499P.
 PR 29-APR-1998; 98US-0083555P.
 PR 05-MAY-1998; 98US-0083566P.
 PR 06-MAY-1998; 98US-0084414P.
 PR 07-MAY-1998; 98US-0084639P.
 PR 07-MAY-1998; 98US-0084640P.
 PR 07-MAY-1998; 98US-0084643P.
 PR 15-MAY-1998; 98US-0085579P.
 PR 15-MAY-1998; 98US-0085580P.
 PR 15-MAY-1998; 98US-0085582P.
 PR 15-MAY-1998; 98US-0085700P.
 PR 18-MAY-1998; 98US-0086032P.
 PR 22-MAY-1998; 98US-0086392P.
 PR 22-MAY-1998; 98US-0086486P.
 PR 28-MAY-1998; 98US-0087098P.
 PR 28-MAY-1998; 98US-0087208P.
 PR 02-JUN-1998; 98US-0087609P.
 PR 02-JUN-1998; 98US-0087759P.
 PR 03-JUN-1998; 98US-0087827P.
 PR 04-JUN-1998; 98US-0088025P.
 PR 04-JUN-1998; 98US-0088029P.
 PR 04-JUN-1998; 98US-0088033P.
 PR 04-JUN-1998; 98US-0088326P.
 PR 05-JUN-1998; 98US-0088167P.
 PR 05-JUN-1998; 98US-0088202P.
 PR 05-JUN-1998; 98US-0088212P.
 PR 05-JUN-1998; 98US-0088217P.
 PR 09-JUN-1998; 98US-0088655P.
 PR 10-JUN-1998; 98US-0088722P.
 PR 10-JUN-1998; 98US-0088738P.
 PR 10-JUN-1998; 98US-0088740P.
 PR 10-JUN-1998; 98US-0088811P.
 PR 10-JUN-1998; 98US-0088824P.
 PR 10-JUN-1998; 98US-0088825P.
 PR 10-JUN-1998; 98US-0088826P.
 PR 11-JUN-1998; 98US-0088861P.
 PR 11-JUN-1998; 98US-0088863P.
 PR 11-JUN-1998; 98US-0088876P.
 PR 11-JUN-1998; 98US-0089090P.
 PR 12-JUN-1998; 98US-0089105P.
 PR 12-JUN-1998; 98US-0089112P.
 PR 16-JUN-1998; 98US-0089514P.
 PR 16-JUN-1998; 98US-0089514P.
 PR 17-JUN-1998; 98US-0089538P.
 PR 17-JUN-1998; 98US-0089538P.
 PR 17-JUN-1998; 98US-0089538P.
 PR 18-JUN-1998; 98US-0089538P.
 PR 18-JUN-1998; 98US-0089538P.
 PR 18-JUN-1998; 98US-0089538P.
 PR 18-JUN-1998; 98US-0089538P.
 PR 22-JUN-1998; 98US-0090252P.
 PR 22-JUN-1998; 98US-0090254P.
 PR 24-JUN-1998; 98US-0090429P.
 PR 24-JUN-1998; 98US-0090435P.
 PR 24-JUN-1998; 98US-0090444P.

PR 24-JUN-1998; 98US-0090461P.
 PR 24-JUN-1998; 98US-0090535P.
 PR 24-JUN-1998; 98US-0090540P.
 PR 25-JUN-1998; 98US-0090676P.
 PR 25-JUN-1998; 98US-0090676P.
 PR 25-JUN-1998; 98US-0090688P.
 PR 25-JUN-1998; 98US-0090690P.
 PR 25-JUN-1998; 98US-0090694P.
 PR 25-JUN-1998; 98US-0090696P.
 PR 25-JUN-1998; 98US-0090696P.
 PR 26-JUN-1998; 98US-0090862P.
 PR 26-JUN-1998; 98US-0090863P.
 PR 26-JUN-1998; 98US-0091010P.
 PR 26-JUN-1998; 98US-0091359P.
 PR 01-JUL-1998; 98US-0091544P.
 PR 01-JUL-1998; 98US-0091478P.
 PR 02-JUL-1998; 98US-0091486P.
 PR 02-JUL-1998; 98US-0091626P.
 PR 02-JUL-1998; 98US-0091628P.
 PR 02-JUL-1998; 98US-0091632P.
 PR 02-JUL-1998; 98US-0094006P.
 PR 04-AUG-1998; 98US-0095282P.
 PR 10-AUG-1998; 98US-0095982P.
 PR 10-AUG-1998; 98US-0096012P.
 PR 17-AUG-1998; 98US-0096757P.
 PR 17-AUG-1998; 98US-0096766P.
 PR 17-AUG-1998; 98US-0096667P.
 PR 17-AUG-1998; 98US-0096891P.
 PR 17-AUG-1998; 98US-0096897P.
 PR 18-AUG-1998; 98US-0096949P.
 PR 18-AUG-1998; 98US-0096959P.
 PR 18-AUG-1998; 98US-0097022P.
 PR 25-AUG-1998; 98US-0097952P.
 PR 25-AUG-1998; 98US-0097955P.
 PR 26-AUG-1998; 98US-0097971P.
 PR 26-AUG-1998; 98US-0097974P.
 PR 26-AUG-1998; 98US-0098014P.
 PR 01-SEP-1998; 98US-0098716P.
 PR 01-SEP-1998; 98US-0098723P.
 PR 02-SEP-1998; 98US-0098803P.
 PR 02-SEP-1998; 98US-0098821P.
 PR 02-SEP-1998; 98US-0098843P.
 PR 09-SEP-1998; 98US-0099602P.
 PR 10-SEP-1998; 98US-0099741P.
 PR 10-SEP-1998; 98US-0099754P.
 PR 10-SEP-1998; 98US-0099763P.
 PR 10-SEP-1998; 98US-0099812P.
 PR 15-SEP-1998; 98US-0100388P.
 PR 16-SEP-1998; 98US-0100662P.
 PR 16-SEP-1998; 98US-0100664P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 17-SEP-1998; 98US-0100683P.
 PR 17-SEP-1998; 98US-0100684P.
 PR 17-SEP-1998; 98US-0100931P.
 PR 17-SEP-1998; 98US-0100930P.
 PR 18-SEP-1998; 98US-0100849P.
 PR 18-SEP-1998; 98US-0101014P.
 PR 18-SEP-1998; 98US-0101068P.
 PR 23-SEP-1998; 98US-0101471P.
 PR 23-SEP-1998; 98US-0101472P.
 PR 23-SEP-1998; 98US-0101475P.
 PR 23-SEP-1998; 98US-0101477P.
 PR 24-SEP-1998; 98US-0101738P.
 PR 24-SEP-1998; 98US-0101739P.
 PR 24-SEP-1998; 98US-0101743P.
 PR 24-SEP-1998; 98US-0101922P.
 PR 25-SEP-1998; 98US-0101786P.
 PR 29-SEP-1998; 98US-0102207P.
 PR 29-SEP-1998; 98US-0102240P.
 PR 29-SEP-1998; 98US-0102330P.

PR 29-SEP-1998; 98US-0102331P.
PR 30-SEP-1998; 98US-0102487P.
PR 30-SEP-1998; 98US-0102570P.
PR 30-SEP-1998; 98US-0102571P.
PR 01-OCT-1998; 98US-0102684P.
PR 01-OCT-1998; 98US-0102687P.
PR 02-OCT-1998; 98US-0102965P.
PR 06-OCT-1998; 98US-0103258P.
PR 06-OCT-1998; 98US-0103449P.

Query Match 99.8%; Score 1843; DB 6; Length 348;
Best Local Similarity 99.7%; Pred. No. 4,5e-169;
Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRNTALIGLILITITFLVAEAGAPNNLSLMQTSKENHALASSSLCDEKQITON 60
Db 1 MLCPRNTALIGLILITITFLVAEAGAPNNLSLMQTSKENHALASSSLCDEKQITON 60
QY 61 YSKVLAENVTSWPKATNAVLCPPIALRNLIITWELIAGQPSCTKAYKRETNKE 120
Db 61 YSKVLAENVTSWPKATNAVLCPPIALRNLIITWELIAGQPSCTKAYKRETNKE 120
QY 121 TNCIDRITVSPDPDQNSDIQRPVAITHDGYRCIMVPPDGNFRGYHLQVLTPEVTL 180
Db 121 TNCIDRITVSPDPDQNSDIQRPVAITHDGYRCIMVPPDGNFRGYHLQVLTPEVTL 180
QY 181 FQNRNRTAVCAKAVAGKPAQISWIPBGDCATKQEWNSGTVTYKSTCHWEVHNVSTVICH 240
Db 181 FQNRNRTAVCAKAVAGKPAQISWIPBGDCATKQEWNSGTVTYKSTCHWEVHNVSTVICH 240
QY 241 VSHLTGKSLYIILLPVPKAKSAKLYPIIITIIITVGYIMLKNGCRKTKLNT 300
Db 241 VSHLTGKSLYIILLPVPKAKSAKLYPIIITIIITVGYIMLKNGCRKTKLNT 300
QY 301 ESTPVVEEDMQPYASTEKNNPLYDTNKKVKAQALQSEVPTDHTL 348
Db 301 ESTPVVEEDMQPYASTEKNNPLYDTNKKVKAQALQSEVPTDHTL 348

RESULT 15
ID ABU92806 standard; protein; 348 AA.
XX ABU92806;
AC
XX
DT 18-JUL-2003 (first entry)
XX
DE Human secreted/transmembrane protein (PRO) #247.
XX
XX Human; secreted protein; transmembrane protein; PRO; tumour;
KW proliferation; differentiation; chondrocyte cell; TNF-alpha;
KW tumour necrosis factor-alpha; gene therapy.
XX
OS Homo sapiens.
XX
XX US2003036149-A1.
XX
XX 20-FEB-2003.
XX
XX 02-JUL-2002; 2002US-00187746.
XX
XX 18-SEP-1997; 97US-0059263P.
XX 18-SEP-1997; 97US-0059266P.
XX 17-OCT-1997; 97US-0062250P.
XX 21-OCT-1997; 97US-0063486P.
XX 24-OCT-1997; 97US-0063120P.
XX 24-OCT-1997; 97US-0063121P.
XX 28-OCT-1997; 97US-0063540P.
XX 28-OCT-1997; 97US-0063541P.
XX 28-OCT-1997; 97US-0063544P.
XX 28-OCT-1997; 97US-0063564P.
XX 29-OCT-1997; 97US-0063734P.
XX 31-OCT-1997; 97US-0063870P.

PR 31-OCT-1997; 97US-0064103P.
PR 13-NOV-1997; 97US-0065311P.
PR 21-NOV-1997; 97US-0066120P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066772P.
PR 11-DEC-1997; 97US-0069335P.
PR 12-DEC-1997; 97US-0069425P.
PR 17-DEC-1997; 97US-0069870P.
PR 18-DEC-1997; 97US-00708017P.
PR 10-MAR-1998; 97US-0071450P.
PR 11-MAR-1998; 97US-0071632P.
PR 11-MAR-1998; 97US-0071649P.
PR 20-MAR-1998; 97US-0071886P.
PR 20-MAR-1998; 97US-0071893P.
PR 27-MAR-1998; 97US-0071964P.
PR 31-MAR-1998; 97US-0071978P.
PR 31-MAR-1998; 97US-0080107P.
PR 01-APR-1998; 97US-0080194P.
PR 01-APR-1998; 97US-0080327P.
PR 01-APR-1998; 97US-0080333P.
PR 08-APR-1998; 97US-0081043P.
PR 08-APR-1998; 97US-0081070P.
PR 09-APR-1998; 97US-0081195P.
PR 15-APR-1998; 97US-0081838P.
PR 21-APR-1998; 97US-0082568P.
PR 21-APR-1998; 97US-0082569P.
PR 22-APR-1998; 97US-0082704P.
PR 22-APR-1998; 97US-0082797P.
PR 28-APR-1998; 97US-0083322P.
PR 28-APR-1998; 97US-0083495P.
PR 29-APR-1998; 97US-0083496P.
PR 29-APR-1998; 97US-0083499P.
PR 29-APR-1998; 97US-0083559P.
PR 05-MAY-1998; 97US-0084366P.
PR 06-MAY-1998; 97US-0084414P.
PR 07-MAY-1998; 97US-0084639P.
PR 07-MAY-1998; 97US-0084640P.
PR 07-MAY-1998; 97US-0084643P.
PR 15-MAY-1998; 97US-0085579P.
PR 15-MAY-1998; 97US-0085580P.
PR 15-MAY-1998; 97US-0085582P.
PR 15-MAY-1998; 97US-0085700P.
PR 15-MAY-1998; 97US-0086023P.
PR 18-MAY-1998; 97US-0086332P.
PR 22-MAY-1998; 97US-0086486P.
PR 22-MAY-1998; 97US-0087098P.
PR 28-MAY-1998; 97US-0087208P.
PR 02-JUN-1998; 97US-0087509P.
PR 03-JUN-1998; 97US-0087827P.
PR 04-JUN-1998; 97US-0088025P.
PR 04-JUN-1998; 97US-0088028P.
PR 04-JUN-1998; 97US-0088029P.
PR 04-JUN-1998; 97US-0088033P.
PR 04-JUN-1998; 97US-0088126P.
PR 05-JUN-1998; 97US-0088167P.
PR 05-JUN-1998; 97US-0088202P.
PR 05-JUN-1998; 97US-0088217P.
PR 05-JUN-1998; 97US-0088217P.
PR 09-JUN-1998; 97US-0088655P.
PR 10-JUN-1998; 97US-0088722P.
PR 10-JUN-1998; 97US-0088738P.
PR 10-JUN-1998; 97US-0088740P.
PR 10-JUN-1998; 97US-0088811P.
PR 10-JUN-1998; 97US-0088821P.
PR 10-JUN-1998; 97US-0088825P.
PR 10-JUN-1998; 97US-0088825P.
PR 10-JUN-1998; 97US-0088861P.
PR 11-JUN-1998; 97US-0088863P.
PR 11-JUN-1998; 97US-0088876P.
PR 12-JUN-1998; 97US-0089109P.
PR 12-JUN-1998; 97US-0089105P.
PR 16-JUN-1998; 97US-0089512P.

PR 16-JUN-1998; 98US-0089514P.
 PR 17-JUN-1998; 98US-0089538P.
 PR 17-JUN-1998; 98US-0089598P.
 PR 17-JUN-1998; 98US-0089655P.
 PR 18-JUN-1998; 98US-0089608P.
 PR 19-JUN-1998; 98US-0089952P.
 PR 22-JUN-1998; 98US-0090246P.
 PR 22-JUN-1998; 98US-0090252P.
 PR 22-JUN-1998; 98US-0090254P.
 PR 24-JUN-1998; 98US-0090432P.
 PR 24-JUN-1998; 98US-0090433P.
 PR 24-JUN-1998; 98US-0090444P.
 PR 24-JUN-1998; 98US-0090461P.
 PR 24-JUN-1998; 98US-0090535P.
 PR 24-JUN-1998; 98US-0090540P.
 PR 25-JUN-1998; 98US-0090676P.
 PR 25-JUN-1998; 98US-0090678P.
 PR 25-JUN-1998; 98US-0090688P.
 PR 25-JUN-1998; 98US-0090690P.
 PR 25-JUN-1998; 98US-0090694P.
 PR 25-JUN-1998; 98US-0090695P.
 PR 25-JUN-1998; 98US-0090696P.
 PR 26-JUN-1998; 98US-00105413.
 PR 26-JUN-1998; 98US-0090863P.
 PR 26-JUN-1998; 98US-0090863P.
 PR 26-JUN-1998; 98US-0091010P.
 PR 01-JUL-1998; 98US-0091359P.
 PR 01-JUL-1998; 98US-0091544P.
 PR 02-JUL-1998; 98US-0091478P.
 PR 02-JUL-1998; 98US-0091486P.
 PR 02-JUL-1998; 98US-0091625P.
 PR 02-JUL-1998; 98US-0091628P.
 PR 02-JUL-1998; 98US-0091632P.
 PR 02-JUL-1998; 98US-0094006P.
 PR 04-AUG-1998; 98US-0095282P.
 PR 10-AUG-1998; 98US-0095598P.
 PR 10-AUG-1998; 98US-0096012P.
 PR 17-AUG-1998; 98US-0096757P.
 PR 17-AUG-1998; 98US-0096766P.
 PR 17-AUG-1998; 98US-0096867P.
 PR 17-AUG-1998; 98US-0096891P.
 PR 17-AUG-1998; 98US-0096897P.
 PR 18-AUG-1998; 98US-0096949P.
 PR 18-AUG-1998; 98US-0096959P.
 PR 18-AUG-1998; 98US-0097022P.
 PR 26-AUG-1998; 98US-0097952P.
 PR 26-AUG-1998; 98US-0097954P.
 PR 26-AUG-1998; 98US-0097955P.
 PR 26-AUG-1998; 98US-0097971P.
 PR 26-AUG-1998; 98US-0097974P.
 PR 26-AUG-1998; 98US-0098014P.
 PR 01-SEP-1998; 98US-0098716P.
 PR 01-SEP-1998; 98US-0098723P.
 PR 02-SEP-1998; 98US-0098803P.
 PR 02-SEP-1998; 98US-0098821P.
 PR 09-SEP-1998; 98US-0099602P.
 PR 10-SEP-1998; 98US-0099741P.
 PR 10-SEP-1998; 98US-0099754P.
 PR 10-SEP-1998; 98US-0099763P.
 PR 10-SEP-1998; 98US-0099812P.
 PR 15-SEP-1998; 98US-0100388P.
 PR 15-SEP-1998; 98US-0100662P.
 PR 16-SEP-1998; 98US-0100664P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 16-SEP-1998; 98US-0101751P.
 PR 17-SEP-1998; 98US-0100684P.
 PR 17-SEP-1998; 98US-0100919P.
 PR 17-SEP-1998; 98US-0100930P.
 PR 18-SEP-1998; 98US-0100849P.
 PR 18-SEP-1998; 98US-0101014P.
 PR 18-SEP-1998; 98US-0101068P.

PR 23-SEP-1998; 98US-0101471P.
 PR 23-SEP-1998; 98US-0101472P.
 PR 23-SEP-1998; 98US-0101475P.
 PR 23-SEP-1998; 98US-0101477P.
 PR 24-SEP-1998; 98US-0101738P.
 PR 24-SEP-1998; 98US-0101739P.
 PR 24-SEP-1998; 98US-0101743P.
 PR 24-SEP-1998; 98US-0101922P.
 PR 25-SEP-1998; 98US-0101786P.
 PR 29-SEP-1998; 98US-0102207P.
 PR 29-SEP-1998; 98US-0102240P.
 PR 29-SEP-1998; 98US-0102330P.
 PR 29-SEP-1998; 98US-0102331P.
 PR 30-SEP-1998; 98US-0102487P.
 PR 30-SEP-1998; 98US-0102570P.
 PR 30-SEP-1998; 98US-0102571P.
 PR 01-OCT-1998; 98US-0102684P.
 PR 01-OCT-1998; 98US-0102687P.
 PR 02-OCT-1998; 98US-0102655P.
 PR 06-OCT-1998; 98US-0102958P.
 PR 06-OCT-1998; 98US-0103499P.
 PR 07-OCT-1998; 98US-00168978.

Query Match 99.8%; Score 1843; DB 6; Length 348;
 Best Local Similarity 99.7%; Pred. No. 4.5e-169;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MCGPRTANIGLLIITITFLVAEAGAAQPNNSIMLQTSKFNHAAASSICMDEKOTON 60
 DB 1 MCGPRTANIGLLIITITFLVAEAGAAQPNNSIMLQTSKFNHAAASSICMDEKOTON 60
 QY 61 YSKVLAEVNTSWPVKATNAVLCCPPIALRNLIITFEIILRGQPSCTAYRKEITKE 120
 DB 61 YSKVLAEVNTSWPVKATNAVLCCPPIALRNLIITFEIILRGQPSCTAYRKEITKE 120
 QY 121 TNCIDERITWSPRPNDSIDQIRPAVITHDGYRCIMVTPDGNFHHGYHLOVATPEVLT 180
 DB 121 TNCIDERITWSPRPNDSIDQIRPAVITHDGYRCIMVTPDGNFHHGYHLOVATPEVLT 180
 QY 181 FQNRRTAVCAKAGAPPAQISWIPGDCATKQEYNSNGIVTKSTCHWEVHNVSTVTC 240
 DB 181 FQNRRTAVCAKAGAPPAQISWIPGDCATKQEYNSNGIVTKSTCHWEVHNVSTVTC 240
 QY 241 VSHLTGKSLYIELLPVPGAKKSAKLYIPYIIITITITVGIWILKNGCKRYLAKNT 300
 DB 241 VSHLTGKSLYIELLPVPGAKKSAKLYIPYIIITITITVGIWILKNGCKRYLAKNT 300
 QY 301 ESTPVEEDEMOPYASTEKNNFLYDTNWKVKSQAOLQSEVPTDLHTL 348
 DB 301 ESTPVEEDEMOPYASTEKNNFLYDTNWKVKSQAOLQSEVPTDLHTL 348

Search completed: May 7, 2004, 11:40:44
 Job time : 63 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: May 7, 2004, 11:39:39 ; Search time 22 Seconds
(without alignments)
816.629 Million cell updates/sec

Title: US-10-009-445A-20

Perfect score: 1846

Sequence: 1 MLCGWRTRNNGILLITFL.....NKVKASQALQSEVDTLHTL 348

Scoring table:

BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 389414 seqs, 51625971 residues

Total number of hits satisfying chosen parameters: 389414

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

Issued Patents AA.*
1: /cgn2_6/ptodata/2/iaa/5A.COMB.pep.*
2: /cgn2_6/ptodata/2/iaa/5B.COMB.pep.*
3: /cgn2_6/ptodata/2/iaa/6A.COMB.pep.*
4: /cgn2_6/ptodata/2/iaa/6B.COMB.pep.*
5: /cgn2_6/ptodata/2/iaa/PCTUS.COMB.pep.*
6: /cgn2_6/ptodata/2/iaa/backfiles.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1822	98.7	348	4	US-09-489-847-211
2	1779	96.4	348	4	US-09-489-847-368
3	1779	96.4	349	4	US-09-489-847-242
4	131	7.1	1091	3	US-08-986-465-5
5	125.5	6.8	479	4	US-09-723-368-2
6	125	6.8	731	1	US-08-070-165F-10
7	125	6.8	731	2	US-08-885-418-10
8	120	6.5	1101	3	US-08-986-485-2
9	117	6.3	458	4	US-09-435-956A-1
10	115	6.2	1253	4	US-08-506-296B-14
11	114.5	6.2	398	4	US-09-778-510-4
12	111	6.0	729	1	US-08-070-165F-6
13	111	6.0	729	2	US-08-885-418-6
14	110.5	6.0	432	4	US-09-778-510-2
15	109.5	5.9	442	4	US-09-778-510-20
16	109.5	5.9	442	4	US-09-930-803-1
17	108.5	5.9	440	4	US-09-866-028-61
18	108.5	5.9	517	4	US-09-723-368-4
19	107.5	5.8	315	4	US-09-910-174B-28
20	107.5	5.8	315	4	US-09-620-461-28
21	107.5	5.8	1059	4	US-09-907-794A-290
22	107.5	5.8	1059	4	US-09-905-125A-290
23	107.5	5.8	1059	4	US-09-902-775A-290
24	107.5	5.8	1119	4	US-09-907-794A-294
25	107.5	5.8	1119	4	US-09-905-125A-294
26	107.5	5.8	1119	4	US-09-902-775A-294
27	105.5	5.7	526	1	US-08-471-570-4

28	105.5	5.7	652	1	US-08-471-570-10	Sequence 10, Appl
29	105	5.7	423	4	US-09-778-510-22	Sequence 22, Appl
30	104.5	5.7	274	4	US-09-570-367C-19	Sequence 19, Appl
31	104.5	5.7	274	4	US-09-915-524-19	Sequence 19, Appl
32	104.5	5.7	763	1	US-08-471-570-6	Sequence 6, Appl
33	104.5	5.7	769	1	US-08-471-570-8	Sequence 8, Appl
34	103.5	5.6	278	4	US-09-570-367C-2	Sequence 2, Appl
35	103.5	5.6	278	4	US-09-915-524-2	Sequence 2, Appl
36	102.5	5.6	434	3	US-09-540-245A-19	Sequence 19, Appl
37	102	5.5	316	4	US-09-910-174B-24	Sequence 24, Appl
38	102	5.5	316	4	US-09-620-461-24	Sequence 24, Appl
39	101.5	5.5	526	4	US-09-910-174B-9	Sequence 9, Appl
40	101.5	5.5	526	4	US-09-620-461-9	Sequence 9, Appl
41	101.5	5.5	1461	4	US-09-976-594-531	Sequence 531, App
42	100.5	5.4	398	4	US-09-778-510-6	Sequence 6, Appl
43	100.5	5.4	398	4	US-09-907-794A-84	Sequence 84, Appl
44	100.5	5.4	398	4	US-09-905-125A-84	Sequence 84, Appl
45	100.5	5.4	398	4	US-09-902-775A-84	Sequence 84, Appl

ALIGNMENTS

RESULT 1
US-09-489-847-211
Sequence 211, Application US/09489847
Patent No. 6476195
GENERAL INFORMATION:
APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
FILE REFERENCE: P2031p1
CURRENT APPLICATION NUMBER: US/09/489,847
CURRENT FILING DATE: 2000-01-24
EARLIER APPLICATION NUMBER: PCT/US99/17130
EARLIER FILING DATE: 1999-07-29
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER FILING DATE: 1998-07-30
EARLIER APPLICATION NUMBER: 60/095,486
EARLIER FILING DATE: 1998-08-05
EARLIER APPLICATION NUMBER: 60/096,319
EARLIER FILING DATE: 1998-08-12
EARLIER APPLICATION NUMBER: 60/095,454
EARLIER FILING DATE: 1998-08-06
EARLIER APPLICATION NUMBER: 60/095,455
EARLIER FILING DATE: 1998-08-06
NUMBER OF SEQ ID NOS: 376
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 211
LENGTH: 348
TYPE: PRT
ORGANISM: Homo sapiens
US-09-489-847-211

Query Match 98.7%; Score 1822; DB 4; Length 348;
Best Local Similarity 98.6%; Pred. No. 5.8e-180;
Matches 343; Conservative 2; Mismatches 3; Indels 0; Gaps 0;

QY	1	MLCPWRTRNNGILLITFLVAFBGAQPNNSLMQTSKFNHALSSSLCMDEKQITN	60
DB	1	MLCPWRTRNNGILLITFLVAFBGAQPNNSLMQTSKFNHALSSSLCMDEKQITN	60
QY	61	YSKVLAEVNTSWPKATNAVLCCPPIALNLIITWEIILRGQPSCTAYARKNETYKE	120
DB	61	YSKVLAEVNTSWPKATNAVLCCPPIALNLIITWEIILRGQPSCTAYARKNETYKE	120
QY	121	TNCTDERITVSRPDNSDQIRPVATIDGGYRCIMVPPDGFHSGYHLQVLVTEVTL	180
DB	121	TNCTDERITVSRPDNSDQIRPVATIDGGYRCIMVPPDGFHSGYHLQVLVTEVTL	180
QY	181	FOKNRRYAVCAVAGRAQISWIPGDCATKQEYNSGTVVKSICMEVHNVSTVTC	240
DB	181	FOKNRRYAVCAVAGRAQISWIPGDCATKQEYNSGTVVKSICMEVHNVSTVTC	240

QY 241 VSHLTGKSLYIELLPVPAKKSAGLYPIIITITITVGFIMLLKNGCRKYLKNT 300
DB 241 VSHLTGKSLYIELLPVPAKKSAGLYPIIITITITVGFIMLLKNGCRKYLKNT 300
QY 301 ESTPVEEDEMOPYASTYKKNPLDYDTNKKVKSQALQSEVDTDLHTL 348
DB 301 ESTPVEEDEMOPYASTYKKNPLDYDTNKKVKSQALQSEVDTDLHTL 348

RESULT 2

US-09-489-847-368
Sequence 368, Application US/09489847
Patent No. 6476195
GENERAL INFORMATION:
APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
FILE REFERENCE: P2031P1
CURRENT APPLICATION NUMBER: US/09/489,847
EARLIER FILING DATE: 2000-01-24
EARLIER APPLICATION NUMBER: PCT/US99/17130
EARLIER FILING DATE: 1999-07-29
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER FILING DATE: 1998-07-30
EARLIER APPLICATION NUMBER: 60/095,486
EARLIER FILING DATE: 1998-08-05
EARLIER APPLICATION NUMBER: 60/096,319
EARLIER FILING DATE: 1998-08-12
EARLIER APPLICATION NUMBER: 60/095,454
EARLIER FILING DATE: 1998-08-06
EARLIER APPLICATION NUMBER: 60/095,455
EARLIER FILING DATE: 1998-08-06
NUMBER OF SEQ ID NOS: 376
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 368
LENGTH: 348
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (283)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
FEATURE:
NAME/KEY: SITE
LOCATION: (293)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
FEATURE:
NAME/KEY: SITE
LOCATION: (325)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
FEATURE:
NAME/KEY: SITE
LOCATION: (326)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-489-847-368

Query Match 96.4%; Score 1779; DB 4; Length 348;
Best Local Similarity 96.6%; Pred. No. 1.6e-175;
Matches 336; Conservative 3; Mismatches 9; Indels 0; Gaps 0;

QY 1 MLCPEWRTANGLILLITITFLVAEAGAAQPNNSIMLTQSKENHALASSSLCMDEKQITON 60
DB 1 MLCPEWRTANGLILLITITFLVAEAGAAQPNNSIMLTQSKENHALASSSLCMDEKQITON 60
QY 61 YSKYLAENVTSWPKMATNAVLCPPIALRLIITWEIILRGQPSCTKAYKKEITNETKE 120
DB 61 YSKYLAENVTSWPKMATNAVLCPPIALRLIITWEIILRGQPSCTKAYKKEITNETKE 120
QY 121 TNCDEEITWSPRDQSDQIRPVATTHDGYRCIMVTPDGFHGHYHLQVLTPEVTL 180
DB 121 TNCDEEITWSPRDQSDQIRPVATTHDGYRCIMVTPDGFHGHYHLQVLTPEVTL 180
QY 181 FQNNRTAVCKAVAGKPAQISWIPBGCAATKQEYNSNGTVYKSTCHWEVHNVSTVTC 240

DB 181 FQNNRTAVCKAVAGKPAHISWIPBGCAATKQEYNSNGTVYKSTCHWEVHNVSTVNC 240
QY 241 VSHLTGKSLYIELLPVPAKKSAGLYPIIITITITVGFIMLLKNGCRKYLKNT 300
DB 241 VSHLTGKSLYIELLPVPAKKSAGLYPIIITITITVGFIMLLKNGCRKYLKNT 300
QY 301 ESTPVEEDEMOPYASTYKKNPLDYDTNKKVKSQALQSEVDTDLHTL 348
DB 301 ESTPVEEDEMOPYASTYKKNPLDYDTNKKVKSQALQSEVDTDLHTL 348

RESULT 3

US-09-489-847-242
Sequence 242, Application US/09489847
Patent No. 6476195
GENERAL INFORMATION:
APPLICANT: Rosen et al
TITLE OF INVENTION: 98 Human Secreted Proteins
FILE REFERENCE: P2031P1
CURRENT APPLICATION NUMBER: US/09/489,847
EARLIER FILING DATE: 2000-01-24
EARLIER APPLICATION NUMBER: PCT/US99/17130
EARLIER FILING DATE: 1999-07-29
EARLIER APPLICATION NUMBER: 60/094,657
EARLIER FILING DATE: 1998-07-30
EARLIER APPLICATION NUMBER: 60/095,486
EARLIER FILING DATE: 1998-08-05
EARLIER APPLICATION NUMBER: 60/096,319
EARLIER FILING DATE: 1998-08-12
EARLIER APPLICATION NUMBER: 60/095,454
EARLIER FILING DATE: 1998-08-06
EARLIER APPLICATION NUMBER: 60/095,455
EARLIER FILING DATE: 1998-08-06
NUMBER OF SEQ ID NOS: 376
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 242
LENGTH: 349
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: SITE
LOCATION: (283)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
FEATURE:
NAME/KEY: SITE
LOCATION: (293)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
FEATURE:
NAME/KEY: SITE
LOCATION: (325)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
FEATURE:
NAME/KEY: SITE
LOCATION: (326)
OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
US-09-489-847-242

Query Match 96.4%; Score 1779; DB 4; Length 349;
Best Local Similarity 96.6%; Pred. No. 1.6e-175;
Matches 336; Conservative 3; Mismatches 9; Indels 0; Gaps 0;

QY 1 MLCPEWRTANGLILLITITFLVAEAGAAQPNNSIMLTQSKENHALASSSLCMDEKQITON 60
DB 1 MLCPEWRTANGLILLITITFLVAEAGAAQPNNSIMLTQSKENHALASSSLCMDEKQITON 60
QY 61 YSKYLAENVTSWPKMATNAVLCPPIALRLIITWEIILRGQPSCTKAYKKEITNETKE 120
DB 61 YSKYLAENVTSWPKMATNAVLCPPIALRLIITWEIILRGQPSCTKAYKKEITNETKE 120

QY 121 TNCRTERTWVSRPQNSDLQIRPAITHDGYRCIMTDPGNHRCYHLOVLTPEVTL 180
 Db 121 TNCRTERTWVSRPQNSDLQIRPAITHDGYRCIMTDPGNHRCYHLOVLTPEVTL 180
 QY 181 FQNRRTAVCAKPAQISWIPEDCATKOEYWSNGTIVKSTCHWEVHNVSTVCH 240
 Db 181 FQNRRTAVCAKPAQISWIPEDCATKOEYWSNGTIVKSTCHWEVHNVSTVCH 240
 QY 241 VSHLTGKSLYIELLPVGAKKSAKLYPIYIIITIIITVGFMLKXNGCRKYKNT 300
 Db 241 VSHLTGKSLYIELLPVGAKKSAKLYPIYIIITIIITVGFMLKXNGCRKYKNT 300
 QY 301 ESTPVEDEMOQVASYTEKNPLVDITNKVAKASQASEVDTLHTL 348
 Db 301 ESTPVEDEMOQVASYTEKNPLVDITNKVAKASQASEVDTLHTL 348
 QY 301 ESTPVEDEMOQVASYTEKNPLVDITNKVAKASQASEVDTLHTL 348
 Db 301 ESTPVEDEMOQVASYTEKNPLVDITNKVAKASQASEVDTLHTL 348

RESULT 4

US-08-986-485-5
 ; Sequence 5, Application US/08986485
 ; Patent No. 6046030

GENERAL INFORMATION:

APPLICANT: KU, SHUTJAN
 APPLICANT: SWEET, RAYMOND
 APPLICANT: TRUNER, ALEKSEED
 TITLE OF INVENTION: A HUMAN LIG-1 HOMOLOG (HLIG-1)
 NUMBER OF SEQUENCES: 8
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: RATNER & PRESTIA
 STREET: P.O. BOX 980
 CITY: VALLEY FORGE
 STATE: PA
 COUNTRY: USA
 ZIP: 19482

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette
 COMPUTER: IBM Compatible
 OPERATING SYSTEM: DOS
 SOFTWARE: FASTSEQ for Windows Version 2.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/986,485
 FILING DATE: 08-DEC-1997

CLASSIFICATION:

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: 60/059,448
 FILING DATE: 22-SEP-1997
 ATTORNEY/AGENT INFORMATION:
 NAME: PRESTIA, PAUL F
 REGISTRATION NUMBER: 23,031
 REFERENCE/DOCKET NUMBER: GH-70264
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 610-407-0700
 TELEFAX: 610-407-0701

INFORMATION FOR SEQ ID NO: 5:

SEQUENCE CHARACTERISTICS:
 LENGTH: 1091 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 US-08-986-485-5

Query Match

Best Local Similarity 7.1%; Score 131; DB 3; Length 1091;
 Matches 64; Conservative 37; Mismatches 119; Indels 54; Gaps 14;

QY 87 IALRMIIITWEIIRGQPSCTKAYKETNETKNTCTD-----ERITWVSRPQNSDLQ 141
 Db 610 IAIKRTGATLACATGHPNPDIAQKXG-----IDFAAERRNHV-MPDDV-FF 660
 QY 142 IRPAVITHDGYRCIMTDPGNHRCYHLOVLTPEVTL-----EVLTKQNRRT 187

Db 661 ITDVKIDMGVISCINQNSAGSVSANNTLTLETSLAVPLEDRVYVGEVAFQ----- 715
 QY 188 AVCAKPAQISWIPEDCATKOEYWSNGTIVKSTCHWEVHNVSTVCH 243
 Db 716 --CKA-TGSPTRITWLKGRPLSTERHFTFGNQLVQVNM--IDAGRYTCMGN 769
 QY 244 LTNKSLY--IELLPVGAKKSAKLYPIYIIITIIITVGFMLKXNGCR---YKL 297
 Db 770 PLTERAHSQSLTLPFGCRKQGTGIVTAVCSIVLTSVWCIITQTRKSEFYSV 829
 QY 298 NKTESTPVEDEMOQVASYTEKNPLVDITNKVAKASQASEVDTLHTL 348
 Db 830 TMTDET-IVPPD---VPSYLSQGTLSDRQETV 858

RESULT 5

US-09-723-368-2
 ; Sequence 2, Application US/09723368
 ; Patent No. 6641818

GENERAL INFORMATION:

APPLICANT: NORTHWESTERN UNIVERSITY
 APPLICANT: SPEAR, Patricia G.
 APPLICANT: WARNER, Morgan S.
 APPLICANT: GERAGHTY, Robert G.
 APPLICANT: MARTINEZ, Wanda M.
 APPLICANT: MONTGOMERY, Rebecca I.
 APPLICANT: COHEN, Gary H.
 APPLICANT: EISENBERG, Roselyn J.
 APPLICANT: WHITEBECK, Charles J.
 APPLICANT: KREWMENACHER, Claude
 APPLICANT: UNIVERSITY OF PENNSYLVANIA
 TITLE OF INVENTION: CELLULAR PROTEINS WHICH MEDIATE HERPESVIRUS ENTRY
 FILE REFERENCE: 200290, 0050/201
 CURRENT APPLICATION NUMBER: US/09/723,368
 CURRENT FILING DATE: 2000-11-28
 PRIOR APPLICATION NUMBER: U.S. 60/087,862
 PRIOR FILING DATE: 1998-06-03
 PRIOR APPLICATION NUMBER: PCT/US99/12235
 PRIOR FILING DATE: 1999-06-02
 NUMBER OF SEQ ID NOS: 26
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO 2
 LENGTH: 479
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-09-723-368-2

Query Match 6.8%; Score 125.5; DB 4; Length 479;
 Best Local Similarity 24.7%; Pred. No. 0.00031;
 Matches 53; Conservative 32; Mismatches 87; Indels 43; Gaps 9;

QY 63 KVLAEVNTSWPMAMATNAVLC--PPIALRMIIITWEIIRGQPSCTKAYR----- 112
 Db 37 QVLEVRG---QLGTVLPLPCHLPPVGLVSLVTVQ-----RDPANQNVAAHP 87
 QY 113 KETNETKNTCTDERTITWVSRPD-----QNSDLQIRPAITHDGYRCIMT-PD 161
 Db 88 KMPSPSPKPSGERSLFSVSAKOSTGDTAEIQLDITLHLGLTYVEDENATCEPFTFK 147
 QY 162 GNFRGYHLOVLTPEVTL-----EVLTKQNRRTAVCAKPAQISWIPEDCATKOE 214
 Db 148 GSVRGMTWLRVIAKPNQAEACQVTSOPTVVALCISKEGPPAIIISLSDWEAKET 207
 QY 215 YMSN---GIVTVKSTCHWEVHNV---YTLCHVSH 243
 Db 208 QVSGTLGIVTVSRPTLVPSGRADGVITCKVER 242

RESULT 6

US-08-070-165F-10
 ; Sequence 10, Application US/08070165F
 ; Patent No. 5750365

GENERAL INFORMATION:

APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ing-Ming Chiu
STREET: 52052 Davis Medical Research Center, 480 West
STREET: 9th Avenue
CITY: Columbus
STATE: Ohio
COUNTRY: USA
ZIP: 43210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/070,165F
FILING DATE:
CLASSIFICATION: 435
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614)-293-8093
TELEFAX: (614)-293-5631
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 731 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-070-165F-10

Query Match
Best Local Similarity 22.0%; Score 125; DB 1; Length 731;
Pred. No. 0.00068;
Matches 89; Conservative 54; Mismatches 151; Indels 110; Gaps 20;

10 LGLLILITFLVABAGAAQPNNSMLQTSKENHALASSLCMDKQITQ-----NYSK 63
8 MGLVAVATATL-----SLAPSYNIADTTLEPEDANSSGDDDDNDGSEDFTDNNHMR 62
64 VLAENVTS-----WPKYKATNAVLCPPALRNLIITWEILLRGQSPCTKAYKETNE 117
63 APYWTNTEKLEKLAHPAANTVYKFCP-----AGNPPTSWMKNGKE 107
118 TKEINTDERITWVSPDQNSDQIRPVATHDGYRCIMWTPDGNFHRGYLQVLYV-TP 176
108 FKQ-----EHRIGGFKVRSQHFSLIMESVPSDEGNTCIMENEGSINHYYLADVVERSP 163
177 EYTLFQ---NRNRTA-----VCKAVAKPAAQISWT-----PEGD---CAT 211
164 HRPILQGLPANTTTKVGDAFEVCK-VYSDAQPHIQWIRHFLNGSKIGPDGHPYLKVL 222
212 KOEYWSNGVTYKSTGHWEVHNVSTV-----TCHVSHLTG--NKSLEYIELLPVPAKAKSA 264
223 KSGINSNAEVL-----LHNVTADRGQYTKVSNYIGEANQSAWLTVLPASEKDEER 277
265 KL-----YIPIIITLITIVGFIMLLKNGCRK-----YKAKTESTPV- 305
278 ELDSSEYETIAIYCVGFLITCMIGTIWCHKKGKSGKSDSPSPAVHKLKSK--SLPLR 335
306 ----VEEDMQPYASTEKNNPLDYTTNKVKASQALQSEVDTDL 345
336 RQVTVSADS-----SSSMNSNTPL-----VRITRLSSNNDTHL 369

RESULT 7
US-08-885-418-10
Sequence 10, Application US/08885418
Patent No. 5925528
GENERAL INFORMATION:
APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)

NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ing-Ming Chiu
STREET: 52052 Davis Medical Research Center, 480 West
STREET: 9th Avenue
CITY: Columbus
STATE: Ohio
COUNTRY: USA
ZIP: 43210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent in Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/885,418
FILING DATE:
CLASSIFICATION: 435
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614)-293-8093
TELEFAX: (614)-293-5631
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 731 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-885-418-10

Query Match
Best Local Similarity 22.0%; Score 125; DB 2; Length 731;
Pred. No. 0.00068;
Matches 89; Conservative 54; Mismatches 151; Indels 110; Gaps 20;

10 LGLLILITFLVABAGAAQPNNSMLQTSKENHALASSLCMDKQITQ-----NYSK 63
8 MGLVAVATATL-----SLAPSYNIADTTLEPEDANSSGDDDDNDGSEDFTDNNHMR 62
64 VLAENVTS-----WPKYKATNAVLCPPALRNLIITWEILLRGQSPCTKAYKETNE 117
63 APYWTNTEKLEKLAHPAANTVYKFCP-----AGNPPTSWMKNGKE 107
118 TKEINTDERITWVSPDQNSDQIRPVATHDGYRCIMWTPDGNFHRGYLQVLYV-TP 176
108 FKQ-----EHRIGGFKVRSQHFSLIMESVPSDEGNTCIMENEGSINHYYLADVVERSP 163
177 EYTLFQ---NRNRTA-----VCKAVAKPAAQISWT-----PEGD---CAT 211
164 HRPILQGLPANTTTKVGDAFEVCK-VYSDAQPHIQWIRHFLNGSKIGPDGHPYLKVL 222
212 KOEYWSNGVTYKSTGHWEVHNVSTV-----TCHVSHLTG--NKSLEYIELLPVPAKAKSA 264
223 KSGINSNAEVL-----LHNVTADRGQYTKVSNYIGEANQSAWLTVLPASEKDEER 277
265 KL-----YIPIIITLITIVGFIMLLKNGCRK-----YKAKTESTPV- 305
278 ELDSSEYETIAIYCVGFLITCMIGTIWCHKKGKSGKSDSPSPAVHKLKSK--SLPLR 335
306 ----VEEDMQPYASTEKNNPLDYTTNKVKASQALQSEVDTDL 345
336 RQVTVSADS-----SSSMNSNTPL-----VRITRLSSNNDTHL 369

RESULT 8
US-08-986-485-2
Sequence 2, Application US/08986485
Patent No. 6046030
GENERAL INFORMATION:
APPLICANT: WU, SHUJIAN
APPLICANT: SWEET, RAYMOND
APPLICANT: TRUENH, ALEMESEGED
TITLE OF INVENTION: A HUMAN LIG-1 HOMOLOG (HLIG-1)
NUMBER OF SEQUENCES: 8
CORRESPONDENCE ADDRESS:

ADDRESSEE: RAINIER & PRESTIA
STREET: P.O. BOX 980
CITY: VALLEY FORGE
STATE: PA
COUNTRY: USA
ZIP: 19482
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/986,485
FILING DATE: 08-DEC-1997
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/059,448
FILING DATE: 22-SEP-1997
ATTORNEY/AGENT INFORMATION:
NAME: PRESTIA, PAUL F
REGISTRATION NUMBER: 23,031
REFERENCE/DOCKET NUMBER: GH-70264
TELECOMMUNICATION INFORMATION:
TELEPHONE: 610-407-0700
TELEFAX: 610-407-0701
TELEX: 846169
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 1101 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-986-485-2

Query Match 6.5%; Score 120; DB 3; Length 1101;
Best Local Similarity 23.5%; Pred. No. 0.0043;
Matches 63; Conservative 37; Mismatches 126; Indels 42; Gaps 14;

87 IALRLIITWEIILRGSPSCTKARKETNETKENCND-----ERTWVRPQNSDLQ 141
616 ITRITTTARLECAATGHPNPOIAWQKDG-----TDFPAARERKMTV-MPDDV-FF 666
142 IRPAVITHDGYRCIMVTPDGNFHRGYLQVLTPEVTLFQNRRTAV-----CKAVA 194
667 ITDVXIDAGVYSCAONSAGSISANATLTVEPPLVPLDEDRVSVGETVALQCKA-T 725
195 GKPAQISWIBGD---CATQKQVKS--NGTVYKSTCHMEVHVSVTCTCHVSHLTGNS 249
726 GNPERRITWF-KGDEPLSLTERHHTTPNQLLVQNVV--AEDAGRYTCMSMTLCTER 781
250 LYIEH-LPVPGAKSALTYPIYIITIIITIVGFILWKVNGCRK---YKLNKTEST 303
782 AHSQSLVTPANGCRDGTGTVGFTTAVVSSIVLSVWVCIIYGRKXSESYVTNDET 841
304 PVEEDENQPYASYTEKKNPLYDTTKV 331
842 -VVPDP---VPSYLSQGTLSDRQETV 864
RESULT 9
US-09-435-956A-1
Sequence 1, Application US/09435956A
Patent No. 6469155
GENERAL INFORMATION:
APPLICANT: Universita degli Studi di Bologna
APPLICANT: Institut National de la Sante et de la Recherche M
TITLE OF INVENTION: High and Related V Domain for the Manufacture of a
TITLE OF INVENTION: Medicament for Preventing or Treating HSV-1, HSV-2 and
FILE REFERENCE: MODIANO
CURRENT APPLICATION NUMBER: US/09/435,956A
CURLING FILING DATE: 1999-11-09

NUMBER OF SEQ ID NOS: 2
SOFTWARE: Patent In Ver. 2.1
SEQ ID NO 1
LENGTH: 458
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
OTHER INFORMATION: Original Source: Hela Cell line
OTHER INFORMATION: General Functional Class of Gene: Immunoglobulin
OTHER INFORMATION: Superfamily
OTHER INFORMATION: Binding Macromolecules: HSV-GD
OTHER INFORMATION: Subcellular Localisation: Plasma Membrane
OTHER INFORMATION: Other Information: Viral Receptor
US-09-435-956A-1

Query Match 6.3%; Score 117; DB 4; Length 458;
Best Local Similarity 20.6%; Pred. No. 0.0022;
Matches 54; Conservative 41; Mismatches 113; Indels 54; Gaps 9;

94 IITWEIILRGSPSCTKARKETNETKENCNDCTBERITWVRPQNSDLQIRPAVITHDGY 153
182 VSWMETRLKGE-----AEYQETINPMT---VTVISR-----YRLVPSREARQSL 224
154 RCIMWTPDGNFHRGYLQVLTPEVTL-----FQNRRTAVCAVAKGKPAQISWIP 205
225 ACIVYHMDRFKESLTIVNYQPEVTLBGFQGNWTLQMDVLTCAADANPATEYHWT 284
206 EGDCAKQKQVWNGTVYKSTCHMEVHVSVTCTCHVSHLTGNSLYIEH-----LPVQ 259
285 LNSLPRGVEAGNRITLFFKGPINYSL--AGTYICEATNPIDIGRSGGVNITEKPRPQ 342
260 AKSAKLYPIYIITIIITIVGFILWKVNGCRKXKLNKTESTPVEEDENQPYASYTE 319
343 LGSARLIGTVAVFILTVAIVLTFPL-----YKROQKSP-----PETDGAG 384
320 KNNPLYDTTKVKAQALQSEV 341
385 TDQPL---SQKPEPSPSRQSSL 403

US-08-506-296B-14
Sequence 14, Application US/08506296B
Patent No. 6313265
GENERAL INFORMATION:
APPLICANT: Phillips, Greg
APPLICANT: Cunningham, Bruce A.
APPLICANT: Crossin, Kathryn L.
TITLE OF INVENTION: NEURITE OUTGROWTH-PROMOTING POLYPEPTIDES
TITLE OF INVENTION: CONTAINING FIBROBLAST TYPE III REPEATS AND METHODS OF USE
NUMBER OF SEQUENCES: 77
CORRESPONDENCE ADDRESSES:
ADDRESSER: The Scripps Research Institute
STREET: 10550 No. 6313265th Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: U.S.
ZIP: 92037
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/506,296B
FILING DATE: 24-JUL-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Fitting, Thomas
REGISTRATION NUMBER: 34,163
REFERENCE/DOCKET NUMBER: TSRI 488.0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (619) 554-2937

TELEFAX: (619) 554-6312
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 1253 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-506-296B-14

Query Match 6.2%; Score 115; DB 4; Length 1253;
Best Local Similarity 20.1%; Pred. No. 0.017; Indels 72; Gaps 11;
Matches 64; Conservative 47; Mismatches 135;

QY 77 ANNAVLCPP-----IALNLIITWEILLRQPSCTKAYRKEITETNCT 124
DB 231 ATNSMIDRKPRLFPNTSSSHLVAGQGPLV-ECIAEGFPPTIKMLRSGMPA----- 285
QY 125 DERITWVRPDQNSDQIRPVATHDGYRCIMVDPGNFHGHLQV-----LVTEBV 178
DB 286 -DRVY---QNHKTKQLKVGEDDEGEYRCLAENSLGSAHAYVYVEADPYMLHKFQS 341
QY 179 TLFQENRTAVCAVAGKPAQISW-----IPGDCATKQYWSNGVTWVSTCHWEVHV 234
DB 342 HLYGPETARLDQGVQGRQPEVTRINGIPVEBLAKQKYLQKALILSVQSDIMV 401
QY 235 STVTCVSH-LTGNKSLYIELLPVPGAKSAKLYI-----PYILLITITITVGTWL 286
DB 402 TQCEANRRLGLLANNAYIVVQLPAKITPADNQYMAVQGSYAVLCKAFGAPVPSVQWL 461
QY 287 LKNGGRKXKLNKTESTPVVEEDNQVASYT-----EKNNPYD 326
DB 462 -----DEDITVLQDERFFPYANGTIGIRDLQANDTGRYFCLANDQNNVIM 509
QY 327 TTNKVR-ASQALQSEVDT 343
DB 510 ANLKVDATQITGGPRST 527

RESULT 11
US-09-778-510-4
Sequence 4, Application US/09778510
Patent No. 6512095
GENERAL INFORMATION:
APPLICANT: Baum, Peter
TITLE OF INVENTION: Molecules Designated B7L1
FILE REFERENCE: 2844-US
CURRENT APPLICATION NUMBER: US/09/778,510
CURRENT FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: PCT/US99/17906
PRIOR FILING DATE: 1999-08-05
PRIOR APPLICATION NUMBER: 60/095,663
PRIOR FILING DATE: 1998-08-07
NUMBER OF SEQ ID NOS: 22
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 4
LENGTH: 398
TYPE: PRT
ORGANISM: Mus musculus
US-09-778-510-4

Query Match 6.2%; Score 114.5; DB 4; Length 398;
Best Local Similarity 22.9%; Pred. No. 0.0032; Indels 69; Gaps 9;
Matches 54; Conservative 30; Mismatches 83;

QY 86 PIALRNLIITW-----EILLRQPSCTKAYRKE-----TNETK 119
DB 8 PVPILLILLASMAFGANLSQDSDQSPWTSDETVVAGSTVWLKQVQVHDHDSLSQNSNPAQ 67
QY 120 ET-----NCTBERITWVRPDQNSDQIRPVATHDGYRCIMV----- 159
DB 68 QTLVYFGEKRALRDRQLQVASTPHELSISISNVALLADDEGYTSTIPTMVRTAKSLIVTL 127
QY 160 --PDGNHFRGHVQLVLTPEVTLFQNNRTAVCAVAGKPAQISWIP-----EGDCATK 212

DB 128 GIPQKPIITGY-----KSLRKEKETATLNQSSGSKPAAQLTRKQDQELHGDQTR 179
QY 213 QEWSNGTIVYKSTCHREV---HNVSTVCHVSH--LTG---NKSILYIELLPVPGA 260
DB 180 QEDPNKFTVSSVSFQVTRBEDGANIVCSVNHESLKGADRSTQRIEVLTPTA 235

RESULT 12
US-08-070-165F-6
Sequence 6, Application US/08070165F
Patent No. 5750365

GENERAL INFORMATION:
APPLICANT: Chiu, Ing-Ming
APPLICANT: Poulin, Matthew L
TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
ADDRESSEE: Ing-Ming Chiu
STREET: 52052 Davis Medical Research Center, 480 West
STREET: 9th Avenue
CITY: Columbus
STATE: Ohio
COUNTRY: USA
ZIP: 43210
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/070,165F
FILING DATE:
CLASSIFICATION: 435
TELECOMMUNICATION INFORMATION:
TELEPHONE: (614)-293-8093
TELEFAX: (614)-293-5631
INFORMATION FOR SEQ ID NO: 6:
SEQUENCE CHARACTERISTICS:
LENGTH: 729 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: protein
US-08-070-165F-6

Query Match 6.0%; Score 111; DB 1; Length 729;
Best Local Similarity 22.1%; Pred. No. 0.019; Indels 100; Gaps 19;
Matches 88; Conservative 52; Mismatches 158;

QY 10 LGILLITITFLVAEAGAPNNSLMQTSKENHALASSLCMDKQITQ-----NYSK 63
DB 8 MGLVMVATVTL-----SLARPSYVIAEDTILBEDANSSGDDDDNDGSDFTDNNHMR 62
QY 64 VLAEVNTS-----WPKYMATNAVLCPPIALRNLIITWEILLRQPSCTKAYRKEITNE 117
DB 63 APYWTNTEKLEKLAHVAAPANTYKFRCP-----AGNFTPSMELKNGKE 107
QY 118 TKEITNCTDERITWVRPDQNSDQIRPVATHDGYRCIMVDPGNFHGHLQVLT-TP 176
DB 108 FKQ-----EHRIGCFKVASQHFSLMESVPSDEGNYTCIMENEGSINH7YHLDVVERSP 163
QY 177 EVTLFQ---NKNRRA-----YCKAVAKPAAQISWI-----PBGDCATKOE 214
DB 164 HRPILQGLPANTTTKYGGDAEFYCK-VYSDAOPHIMHFEIUNGSKTGPDGHPYKVL 222
QY 215 YMSNGTIVYKSTCHWEVHNS---TVTCHVSHLTG--NKSILYIELLP-----VPGAK 262
DB 223 KAAGVNTDKREIVLYRVANVSFEDAGEYTCIAGNSTGISYHTAWLTVLPDEBERLDSSE 282
QY 263 SAKIYIPYIITITITITVGFIMWLKNGCRK-----YKLNKTESSTPV-----VE 307
DB 283 YTEIAI-YCVGGFLITCMGITIVCHMKGKGSDFSSPPAVHLSK--SLPLRQVTVS 339

QY 308 EDEMOPVASYTEKNNPLDYTTNKVAKASQALQSEVDTL 345
 Db 340 ADS-----SSSMNSNPL-----VATITRLSSNNDTHL 367

RESULT 13
 US-08-885-418-6
 ; Sequence 6, Application US/08885418
 ; Patent No. 5925528
 ; GENERAL INFORMATION:
 ; APPLICANT: Chiu, Ing-Ming
 ; APPLICANT: Poulin, Matthew L
 ; TITLE OF INVENTION: Acidic Fibroblast Growth Factor (aFGF)
 ; NUMBER OF SEQUENCES: 12
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESS: Ing-Ming Chiu
 ; STREET: 82052 Davis Medical Research Center, 480 West
 ; STREET: 9th Avenue
 ; CITY: Columbus
 ; STATE: Ohio
 ; COUNTRY: USA
 ; ZIP: 43210
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patent Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/885,418
 ; FILING DATE:
 ; CLASSIFICATION: 435
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (614)-293-8093
 ; TELEFAX: (614)-293-5631
 ; INFORMATION FOR SEQ ID NO: 6:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 729 amino acids
 ; TYPE: amino acid
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: Protein
 ; US-08-885-418-6

Query Match 6.0%; Score 111; DB 2; Length 729;
 Best Local Similarity 22.1%; Pred. No. 0.019;
 Matches 88; Conservative 52; Mismatches 156; Indels 100; Gaps 19;

QY 10 LGLILITFLVAEAGAAQNNLSIMLQTSKENHALLASSSLCMEKQITQ-----NYSK 63
 Db 8 MGLVWVATATL-----SLARPSYNIABDTLEPEDANSSGDDEDDNGSEDFTNNDNHR 62
 QY 64 VLAENVTS-----WPVKATNAVLCPPIALRNLIIITWELIRGOPSCTKARKETNE 117
 Db 63 APYNTNTEKLEKHAIVPAANTVKRCP-----AGNPTBEMRLKNGKE 107
 QY 118 TKEINTCDERTIWSRPQNSDLQIRPAITHDGYRCIMWTPDGNFRGTHLCVIV-TP 176
 Db 108 FKQ-----EHRIGGFVRSQHSFLIMESVPSDEGNYTCIMENEGSINHETHLDIVERSP 163
 QY 177 EVTLFQ---NRRKRP-----VCKAVAGKPAQISVI-----PEGCAIKOE 214
 Db 164 HRPILQALPANTTKVGGDAEFVCK-VYSDAQPHIQIRHFEINSGKIGDGHPIYKVL 222
 QY 215 YMSNGTVTKSTCHWEVAVNS-----TVTCHVSHLTG--NKSLEYELLP-----VPGAKK 262
 Db 223 KAAGVNTDKELVLYVAVNSFEDAGEYTCLAGNSTGSIYHTAVLYLPDSEERLDSSE 282
 QY 263 SAKLYIPYIILITLITLVGFILKLVNGCRK-----YKANTESIPV-----VE 307
 Db 263 YTEINAI-YCVGGFLITCMIGITIMCHMKRGKSKDPSPPAVHKLK--SHLRKQVTVS 339
 QY 308 EDEMOPVASYTEKNNPLDYTTNKVAKASQALQSEVDTL 345
 Db 340 ADS-----SSSMNSNPL-----VATITRLSSNNDTHL 367

RESULT 14
 US-09-778-510-2
 ; Sequence 2, Application US/09778510
 ; Patent No. 6512095
 ; GENERAL INFORMATION:
 ; APPLICANT: Baum, Peter
 ; TITLE OF INVENTION: Molecules Designated B7L1
 ; FILE REFERENCE: 2844-US
 ; CURRENT APPLICATION NUMBER: US/09/778,510
 ; CURRENT FILING DATE: 2001-02-07
 ; PRIOR APPLICATION NUMBER: PCT/US99/17906
 ; PRIOR FILING DATE: 1999-08-05
 ; PRIOR APPLICATION NUMBER: 60/095,663
 ; PRIOR FILING DATE: 1998-08-07
 ; NUMBER OF SEQ ID NOS: 22
 ; SOFTWARE: Patent Ver. 2.0
 ; SEQ ID NO 2
 ; LENGTH: 432
 ; TYPE: PRT
 ; ORGANISM: Homo sapien
 ; US-09-778-510-2

Query Match 6.0%; Score 110.5; DB 4; Length 432;
 Best Local Similarity 22.0%; Pred. No. 0.0095;
 Matches 65; Conservative 41; Mismatches 110; Indels 79; Gaps 11;

QY 12 LILILITFLVAEAGAAQNNLSIMLQTSKENHALLASSSLCMEKQITQNYKVLAVNTS 71
 Db 8 LILILITFLVACCPWAPGA-----NLSQGYWQED-----LEGLTL 42
 QY 72 WPKVATNAVLCPPIALRNLIIITW---EILRGOPSCTKARKK-----TNETKE 120
 Db 43 APDEAISTVSSWSPMLASQDSQPTSDFTVAGGVTLKQVCKHEDSLQMSNPAQ 102
 QY 121 T-----NCTBERITWVSRRPDQNSDLQIRPAITHDGYRCIMWTP----- 159
 Db 103 TLTFGRKALRDRIQVLTSTHESISISVVALADSEYTSIFTMPTAKSLVTVLG 162
 QY 160 -PDGNFRGYHQLVTPBVTLFQNNRTPAVKAVAGKPAQISWIP-----EGDCATYQ 213
 Db 163 IPQKPIITGY-----KSLREKDTATLNCQSGSKPAARLUTWKKQDELHGEPTRIQ 214
 QY 214 EYMSNGTVTKSTCHWEV---HNVSTVTCVSH--LTG---NKSLEYELLPVPGA 260
 Db 215 EPNNGKFTVSSVTFQVTRDDGASIVCSVNHESLKGADRSTQRIEVLVTPPTA 269

RESULT 15
 US-09-778-510-20
 ; Sequence 20, Application US/09778510
 ; Patent No. 6512095
 ; GENERAL INFORMATION:
 ; APPLICANT: Baum, Peter
 ; TITLE OF INVENTION: Molecules Designated B7L1
 ; FILE REFERENCE: 2844-US
 ; CURRENT APPLICATION NUMBER: US/09/778,510
 ; CURRENT FILING DATE: 2001-02-07
 ; PRIOR APPLICATION NUMBER: PCT/US99/17906
 ; PRIOR FILING DATE: 1999-08-05
 ; PRIOR APPLICATION NUMBER: 60/095,663
 ; PRIOR FILING DATE: 1998-08-07
 ; NUMBER OF SEQ ID NOS: 22
 ; SOFTWARE: Patent Ver. 2.0
 ; SEQ ID NO 20
 ; LENGTH: 442
 ; TYPE: PRT
 ; ORGANISM: Homo sapien
 ; US-09-778-510-20

Query Match 5.9%; Score 109.5; DB 4; Length 442;
 Best Local Similarity 25.4%; Pred. No. 0.012;

Matches 59; Conservative 32; Mismatches 82; Indels 59; Gaps 14;

QY 77 ATNAVLCPP-IALRNLIITWEIL-----RGQPSCTKAYRKETNETKENC---TDER 127
Db 13 AAAAAAAPGRLRLILLFSAALIFGDDGNLFTKDVTLGEVATISCQVKSDDS 72
QY 128 ITWVSRRPDQ-----NSDLQI--RPAVITHDGYRCIMVT--PD 161
Db 73 VIQLNPNRQTIYFRDPRPKDSRFQLNPFSSSELKVSILNWSISDEGRYFCQLYDPPQ 132
QY 162 GNFRGTHLQVLTPEVTLFQNNRTAV-----CKAVAGKPAQAQISMIPGDCATK- 212
Db 133 ESYTT--ITVLVPRNLMIDIQDTAVEGEIEVNCCTAMASKPATITRMF-KGNTELKG 188
QY 213 ---QEYMSNGTVVKSTCHWEVHNS---TVTGHVSH--LTGN--KSLYIEL 254
Db 189 KSEVEEMSD-MYTVTSQMLKVKHKEDDGVFVICQVEHPAVTGNLTQRYLEV 239

Search completed: May 7, 2004, 11:43:19
Job time : 24 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 7, 2004, 11:42:15 ; Search time 48 Seconds
(Without alignments)
2012.359 Million cell updates/sec

Title: US-10-009-445A-20
Perfect score: 1846
Sequence: 1 MLCWRTANGLILLITFL.....NKVKAQAQLSEVDTDLHTL 348

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1140673 seqs, 27566755 residues

Total number of hits satisfying chosen parameters: 1140673

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Database : Published Applications_AA*

1: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
2: /cgn2_6/ptodata/2/pubpaa/PC1_NEW_PUB.pep.*
3: /cgn2_6/ptodata/2/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/2/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/2/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/2/pubpaa/US07_PUBCOMB.pep.*
7: /cgn2_6/ptodata/2/pubpaa/US08_NEW_PUB.pep.*
8: /cgn2_6/ptodata/2/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/2/pubpaa/US09_PUBCOMB.pep.*
10: /cgn2_6/ptodata/2/pubpaa/US09C_PUBCOMB.pep.*
11: /cgn2_6/ptodata/2/pubpaa/US09C_NEW_PUB.pep.*
12: /cgn2_6/ptodata/2/pubpaa/US10_PUBCOMB.pep.*
13: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
14: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
15: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
16: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
17: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*
18: /cgn2_6/ptodata/2/pubpaa/US10C_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1846	100.0	348	12	US-10-389-231-2
2	1843	99.8	348	12	US-10-206-915-494
3	1843	99.8	348	12	US-10-199-670-494
4	1843	99.8	348	12	US-10-201-858-494
5	1843	99.8	348	12	US-10-205-890-494
6	1843	99.8	348	12	US-10-208-024-494
7	1843	99.8	348	12	US-10-201-853-494
8	1843	99.8	348	12	US-10-174-581-494
9	1843	99.8	348	12	US-10-176-749-494
10	1843	99.8	348	12	US-10-176-749-494
11	1843	99.8	348	12	US-10-176-915-494
12	1843	99.8	348	12	US-10-176-915-494
13	1843	99.8	348	12	US-10-176-484-494
14	1843	99.8	348	12	US-10-180-550-494
15	1843	99.8	348	12	US-10-180-014-494

16	1843	99.8	348	12	US-10-187-738-494	Sequence 494, App
17	1843	99.8	348	12	US-10-187-740-494	Sequence 494, App
18	1843	99.8	348	12	US-10-187-683-494	Sequence 494, App
19	1843	99.8	348	12	US-10-194-363-494	Sequence 494, App
20	1843	99.8	348	12	US-10-194-460-494	Sequence 494, App
21	1843	99.8	348	12	US-10-194-463-494	Sequence 494, App
22	1843	99.8	348	12	US-10-194-464-494	Sequence 494, App
23	1843	99.8	348	12	US-10-195-884-494	Sequence 494, App
24	1843	99.8	348	12	US-10-195-884-494	Sequence 494, App
25	1843	99.8	348	12	US-10-196-744-494	Sequence 494, App
26	1843	99.8	348	12	US-10-196-755-494	Sequence 494, App
27	1843	99.8	348	12	US-10-196-757-494	Sequence 494, App
28	1843	99.8	348	12	US-10-197-704-494	Sequence 494, App
29	1843	99.8	348	12	US-10-197-710-494	Sequence 494, App
30	1843	99.8	348	12	US-10-198-758-494	Sequence 494, App
31	1843	99.8	348	12	US-10-198-766-494	Sequence 494, App
32	1843	99.8	348	12	US-10-199-304-494	Sequence 494, App
33	1843	99.8	348	12	US-10-199-309-494	Sequence 494, App
34	1843	99.8	348	12	US-10-199-313-494	Sequence 494, App
35	1843	99.8	348	12	US-10-199-456-494	Sequence 494, App
36	1843	99.8	348	12	US-10-201-329-494	Sequence 494, App
37	1843	99.8	348	12	US-10-202-412-494	Sequence 494, App
38	1843	99.8	348	12	US-10-206-919-494	Sequence 494, App
39	1843	99.8	348	12	US-10-206-922-494	Sequence 494, App
40	1843	99.8	348	12	US-10-206-924-494	Sequence 494, App
41	1843	99.8	348	12	US-10-206-928-494	Sequence 494, App
42	1843	99.8	348	12	US-10-207-914-494	Sequence 494, App
43	1843	99.8	348	12	US-10-207-921-494	Sequence 494, App
44	1843	99.8	348	12	US-10-207-922-494	Sequence 494, App
45	1843	99.8	348	12	US-10-208-027-494	Sequence 494, App

ALIGNMENTS

RESULT 1	US-10-389-231-2	Sequence 2, Application US/10389231
US-10-389-231-2	Sequence 2, Application US/10389231	
GENERAL INFORMATION:	Publication No. US20030223991A1	
APPLICANT:	Cherwinski, Holly M.	
APPLICANT:	Bigler, Michael E.	
APPLICANT:	Murphy, Craig A.	
APPLICANT:	Sedgwick, Jonathan D.	
APPLICANT:	Phillips, Joseph H.	
TITLE OF INVENTION:	Methods of modulating CD200 receptors	
FILE REFERENCE:	DX01550K	
CURRENT APPLICATION NUMBER:	US/10/389,231	
CURRENT FILING DATE:	2003-03-13	
PRIOR APPLICATION NUMBER:	60/364,513	
PRIOR FILING DATE:	2002-03-15	
NUMBER OF SEQ ID NOS:	14	
SOFTWARE:	PatentIn version 3.1	
SEQ ID NO 2		
LENGTH:	348	
TYPE:	PRT	
ORGANISM:	Homo sapiens	
US-10-389-231-2		
Query Match	100.0%; Score 1846; DB 12; Length 348;	
Best Local Similarity	100.0%; Pred. No. 8.2e-168;	
Matches 348; Conservative 0; Mismatches 0; Indels 0; Gaps 0;		
QY	1 MLCWRTANGLILLITFLVAAEAGAPNNLSIMQTSKENNALSSICMDEKQITON 60	
DB	1 MLCWRTANGLILLITFLVAAEAGAPNNLSIMQTSKENNALSSICMDEKQITON 60	
QY	YSKYLAENVTSWPKATVAVLCCPPIALRNLIITWELILRQPSCTAYRKEITETKE 120	
DB	YSKYLAENVTSWPKATVAVLCCPPIALRNLIITWELILRQPSCTAYRKEITETKE 120	
QY	TNCTDERITVSPDQNSDQIRPVAITHDGYRCIMTPDGNFHHGVLQVYVPEVTL 180	
DB	TNCTDERITVSPDQNSDQIRPVAITHDGYRCIMTPDGNFHHGVLQVYVPEVTL 180	

QY 1 MLCPTATNLGILLITITFLVAEAGAAQPNNSLMLQTSKENHALLASSSLCMDEKQITON 60
 DB 1 MLCPTATNLGILLITITFLVAEAGAAQPNNSLMLQTSKENHALLASSSLCMDEKQITON 60
 QY 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 QY 121 TNCDBERTIWSRPPQNSDLQIRPAVITHDGYRCIMVTPDGNFPHGYHLOVLTPEVTL 180
 DB 121 TNCDBERTIWSRPPQNSDLQIRPAVITHDGYRCIMVTPDGNFPHGYHLOVLTPEVTL 180
 QY 181 FQNRRTAVCKAVAGKPAQAQISWIPEDCATKQEYWSNGVTYKSTCHWEVHNVSTVTC 240
 DB 181 FQNRRTAVCKAVAGKPAQAQISWIPEDCATKQEYWSNGVTYKSTCHWEVHNVSTVTC 240
 QY 241 VSHLTGNKSLYIELLPVPGAKSAGLYPIYIITITITVGFIMLKVNGCKRYKLNKT 300
 DB 241 VSHLTGNKSLYIELLPVPGAKSAGLYPIYIITITITVGFIMLKVNGCKRYKLNKT 300
 QY 301 ESTPVEBDEMOPYASYTEKNPXYDTTNKVASQALQSEVDTDLHTL 348
 DB 301 ESTPVEBDEMOPYASYTEKNPXYDTTNKVASQALQSEVDTDLHTL 348

RESULT 4
 US-10-201-858-494
 Sequence 494, Application US/10201858
 Publication No. US20040038337A1
 GENERAL INFORMATION:
 APPLICANT: Baker, Kevin P.
 APPLICANT: Chen, Jian
 APPLICANT: Desnoyers, Luc
 APPLICANT: Goddard, Audrey
 APPLICANT: Godowski, Paul J.
 APPLICANT: Gurney, Austin L.
 APPLICANT: Pan, James
 APPLICANT: Smith, Victoria
 APPLICANT: Watanabe, Colin K.
 APPLICANT: Wood, William I.
 APPLICANT: Zhang, Zemin
 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 FILE REFERENCE: P3430R1C464
 CURRENT FILING DATE: US/10/201, 858
 PRIOR FILING DATE: 2002-07-23
 PRIOR APPLICATION NUMBER: 10/052586
 PRIOR FILING DATE: 2002-01-15
 PRIOR APPLICATION NUMBER: 60/059263
 PRIOR FILING DATE: 1997-09-18
 PRIOR APPLICATION NUMBER: 60/059266
 PRIOR FILING DATE: 1997-09-18
 PRIOR APPLICATION NUMBER: 60/062250
 PRIOR FILING DATE: 1997-10-17
 PRIOR APPLICATION NUMBER: 60/063120
 PRIOR FILING DATE: 1997-10-24
 PRIOR APPLICATION NUMBER: 60/063121
 PRIOR FILING DATE: 1997-10-24
 PRIOR APPLICATION NUMBER: 60/063486
 PRIOR FILING DATE: 1997-10-21
 PRIOR APPLICATION NUMBER: 60/063540
 PRIOR FILING DATE: 1997-10-28
 PRIOR APPLICATION NUMBER: 60/063541
 PRIOR FILING DATE: 1997-10-28
 PRIOR APPLICATION NUMBER: 60/063544
 PRIOR FILING DATE: 1997-10-28
 PRIOR APPLICATION data removed - See File Wrapper or PALM.
 NUMBER OF SEQ ID NOS: 612
 SEQ ID NO 494
 LENGTH: 348
 TYPE: PRT
 ORGANISM: Homo Sapien
 US-10-201-858-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
 Best Local Similarity 99.7%; Pred. No. 1,6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPTATNLGILLITITFLVAEAGAAQPNNSLMLQTSKENHALLASSSLCMDEKQITON 60
 DB 1 MLCPTATNLGILLITITFLVAEAGAAQPNNSLMLQTSKENHALLASSSLCMDEKQITON 60
 QY 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 QY 121 TNCDBERTIWSRPPQNSDLQIRPAVITHDGYRCIMVTPDGNFPHGYHLOVLTPEVTL 180
 DB 121 TNCDBERTIWSRPPQNSDLQIRPAVITHDGYRCIMVTPDGNFPHGYHLOVLTPEVTL 180
 QY 181 FQNRRTAVCKAVAGKPAQAQISWIPEDCATKQEYWSNGVTYKSTCHWEVHNVSTVTC 240
 DB 181 FQNRRTAVCKAVAGKPAQAQISWIPEDCATKQEYWSNGVTYKSTCHWEVHNVSTVTC 240
 QY 241 VSHLTGNKSLYIELLPVPGAKSAGLYPIYIITITITVGFIMLKVNGCKRYKLNKT 300
 DB 241 VSHLTGNKSLYIELLPVPGAKSAGLYPIYIITITITVGFIMLKVNGCKRYKLNKT 300
 QY 301 ESTPVEBDEMOPYASYTEKNPXYDTTNKVASQALQSEVDTDLHTL 348
 DB 301 ESTPVEBDEMOPYASYTEKNPXYDTTNKVASQALQSEVDTDLHTL 348

RESULT 5
 US-10-205-890-494
 Sequence 494, Application US/10205890
 Publication No. US20040048334A1
 GENERAL INFORMATION:
 APPLICANT: Baker, Kevin P.
 APPLICANT: Chen, Jian
 APPLICANT: Desnoyers, Luc
 APPLICANT: Goddard, Audrey
 APPLICANT: Godowski, Paul J.
 APPLICANT: Gurney, Austin L.
 APPLICANT: Pan, James
 APPLICANT: Smith, Victoria
 APPLICANT: Watanabe, Colin K.
 APPLICANT: Wood, William I.
 APPLICANT: Zhang, Zemin
 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 FILE REFERENCE: P3430R1C519
 CURRENT FILING DATE: US/10/205, 890
 PRIOR FILING DATE: 2002-07-26
 PRIOR APPLICATION NUMBER: 10/052586
 PRIOR FILING DATE: 2002-01-15
 PRIOR APPLICATION NUMBER: 60/059263
 PRIOR FILING DATE: 1997-09-18
 PRIOR APPLICATION NUMBER: 60/059266
 PRIOR FILING DATE: 1997-09-18
 PRIOR APPLICATION NUMBER: 60/062250
 PRIOR FILING DATE: 1997-10-17
 PRIOR APPLICATION NUMBER: 60/063120
 PRIOR FILING DATE: 1997-10-24
 PRIOR APPLICATION NUMBER: 60/063121
 PRIOR FILING DATE: 1997-10-24
 PRIOR APPLICATION NUMBER: 60/063486
 PRIOR FILING DATE: 1997-10-21
 PRIOR APPLICATION NUMBER: 60/063540
 PRIOR FILING DATE: 1997-10-28
 PRIOR APPLICATION NUMBER: 60/063541
 PRIOR FILING DATE: 1997-10-28
 PRIOR APPLICATION NUMBER: 60/063544
 PRIOR FILING DATE: 1997-10-28
 PRIOR APPLICATION data removed - See File Wrapper or PALM.
 NUMBER OF SEQ ID NOS: 612

SEQ ID NO 494
LENGTH: 348
TYPE: PRT
ORGANISM: Homo Sapien
US-10-205-890-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
Best Local Similarity 99.7%; Pred. No. 1.6e-167;
Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPTANGLILLITIFLVAEAGAAPNNLSLQTSKFNHALASSLCMDKQITON 60
DB 1 MLCPTANGLILLITIFLVAEAGAAPNNLSLQTSKFNHALASSLCMDKQITON 60
QY 61 YSKVLAENVTSWPKATNAVLCCPITALNLIITWEIILRGQPSCTKAYRKETNKE 120
DB 61 YSKVLAENVTSWPKATNAVLCCPITALNLIITWEIILRGQPSCTKAYRKETNKE 120
QY 121 TNCDEIRITWSPDQNSDIQIRPVALTHDGYRCIMVTPDGNFHRGYHLQVLTPEVTL 180
DB 121 TNCDEIRITWSPDQNSDIQIRPVALTHDGYRCIMVTPDGNFHRGYHLQVLTPEVTL 180
QY 181 FQNRRTAVCKAVAGKPAQISWIPBGDCATKQSYNSNGTVYKSTCHWEHNVSTVTC 240
DB 181 FQNRRTAVCKAVAGKPAQISWIPBGDCATKQSYNSNGTVYKSTCHWEHNVSTVTC 240
QY 241 VSHLTGNKSLYIELLPVPGAKSKAKLYPIYIILITITVGFIMLKVNGCRKYLKNT 300
DB 241 VSHLTGNKSLYIELLPVPGAKSKAKLYPIYIILITITVGFIMLKVNGCRKYLKNT 300
QY 301 ESTPVEDEDMQPYASYTERKNPLDYDTNKKVKSQALQSEVTDLHTL 348
DB 301 ESTPVEDEDMQPYASYTERKNPLDYDTNKKVKSQALQSEVTDLHTL 348

RESULT 6

US-10-208-024-494
Sequence 494, Application US/10208024
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Smith, Victoria
APPLICANT: Matanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3430R1C538
CURRENT APPLICATION NUMBER: US/10/208,024
CURRENT FILING DATE: 2002-07-29
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-25
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/063120
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063121
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063486
PRIOR FILING DATE: 1997-10-21
PRIOR APPLICATION NUMBER: 60/063540
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063541

PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION data removed - See File Wrapper or PAM.
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 494
LENGTH: 348
TYPE: PRT
ORGANISM: Homo Sapien
US-10-208-024-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
Best Local Similarity 99.7%; Pred. No. 1.6e-167;
Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPTANGLILLITIFLVAEAGAAPNNLSLQTSKFNHALASSLCMDKQITON 60
DB 1 MLCPTANGLILLITIFLVAEAGAAPNNLSLQTSKFNHALASSLCMDKQITON 60
QY 61 YSKVLAENVTSWPKATNAVLCCPITALNLIITWEIILRGQPSCTKAYRKETNKE 120
DB 61 YSKVLAENVTSWPKATNAVLCCPITALNLIITWEIILRGQPSCTKAYRKETNKE 120
QY 121 TNCDEIRITWSPDQNSDIQIRPVALTHDGYRCIMVTPDGNFHRGYHLQVLTPEVTL 180
DB 121 TNCDEIRITWSPDQNSDIQIRPVALTHDGYRCIMVTPDGNFHRGYHLQVLTPEVTL 180
QY 181 FQNRRTAVCKAVAGKPAQISWIPBGDCATKQSYNSNGTVYKSTCHWEHNVSTVTC 240
DB 181 FQNRRTAVCKAVAGKPAQISWIPBGDCATKQSYNSNGTVYKSTCHWEHNVSTVTC 240
QY 241 VSHLTGNKSLYIELLPVPGAKSKAKLYPIYIILITITVGFIMLKVNGCRKYLKNT 300
DB 241 VSHLTGNKSLYIELLPVPGAKSKAKLYPIYIILITITVGFIMLKVNGCRKYLKNT 300
QY 301 ESTPVEDEDMQPYASYTERKNPLDYDTNKKVKSQALQSEVTDLHTL 348
DB 301 ESTPVEDEDMQPYASYTERKNPLDYDTNKKVKSQALQSEVTDLHTL 348

RESULT 7

US-10-201-853-494
Sequence 494, Application US/10201853
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Smith, Victoria
APPLICANT: Matanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
FILE REFERENCE: P3430R1C465
CURRENT APPLICATION NUMBER: US/10/201,853
CURRENT FILING DATE: 2002-07-23
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/062250
PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/063120
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063486
PRIOR FILING DATE: 1997-10-21
PRIOR APPLICATION NUMBER: 60/063540
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063541

Fri May 7 11:49:14 2004

us-10-009-445a-20.rapb

Page 5

```

PRIOR APPLICATION NUMBER: 60/063486
PRIOR FILING DATE: 1997-10-21
PRIOR APPLICATION NUMBER: 60/063540
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063541
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR FILING DATE: 1997-10-28
Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 494
LENGTH: 348
TYPE: PRT
ORGANISM: Homo Sapien
US-10-201-853-494

Query Match
Best Local Similarity 99.8%; Score 1843; DB 12; Length 348;
Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRNTANLGLILITLITFLVAEAGAAQPNNSIMLQTSKENHALLASSSLCMEKQITON 60
DB 1 MLCPRNTANLGLILITLITFLVAEAGAAQPNNSIMLQTSKENHALLASSSLCMEKQITON 60
QY 61 YSKVLAEVNTSWPVKMATNAVLCCEPILRLNLIITWEIIRGQPSCTKAKRETNETKE 120
DB 61 YSKVLAEVNTSWPVKMATNAVLCCEPILRLNLIITWEIIRGQPSCTKAKRETNETKE 120
QY 121 TNCDBERTITWVSRPQNSDLQIRPVALTHDGYRCIMVTPGNHFGVHLQVLTPPEVTL 180
DB 121 TNCDBERTITWVSRPQNSDLQIRPVALTHDGYRCIMVTPGNHFGVHLQVLTPPEVTL 180
QY 121 TNCDBERTITWVSRPQNSDLQIRPVALTHDGYRCIMVTPGNHFGVHLQVLTPPEVTL 180
DB 121 TNCDBERTITWVSRPQNSDLQIRPVALTHDGYRCIMVTPGNHFGVHLQVLTPPEVTL 180
QY 181 FQNRRTAVCAVAKPAQISWIPEDCATKQEWNSGTVTVSTGMEVHNSTVTC 240
DB 181 FQNRRTAVCAVAKPAQISWIPEDCATKQEWNSGTVTVSTGMEVHNSTVTC 240
QY 241 VSHLGNSTLYTELLPVGAKKSAKLYPYIILITITGFIWMLKNGCRKXKNT 300
DB 241 VSHLGNSTLYTELLPVGAKKSAKLYPYIILITITGFIWMLKNGCRKXKNT 300
QY 301 ESTPVEDEMOFYASYTEKNNPLVDITNKVKAQALQSEVDTDLITL 348
DB 301 ESTPVEDEMOFYASYTEKNNPLVDITNKVKAQALQSEVDTDLITL 348

RESULT 8
US-10-174-581-494
Sequence 494, Application US/10174581
Publication No. US20030017540A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C41
CURRENT APPLICATION NUMBER: US/10/174,581
PRIOR FILING DATE: 2002-06-18
PRIOR APPLICATION NUMBER: 10/052586
PRIOR FILING DATE: 2002-01-15
PRIOR APPLICATION NUMBER: 60/059263
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/059266
PRIOR FILING DATE: 1997-09-18
PRIOR APPLICATION NUMBER: 60/062250
```

```

PRIOR FILING DATE: 1997-10-17
PRIOR APPLICATION NUMBER: 60/063120
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063121
PRIOR FILING DATE: 1997-10-24
PRIOR APPLICATION NUMBER: 60/063486
PRIOR FILING DATE: 1997-10-21
PRIOR APPLICATION NUMBER: 60/063540
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063541
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063544
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063564
PRIOR FILING DATE: 1997-10-28
PRIOR APPLICATION NUMBER: 60/063734
PRIOR FILING DATE: 1997-10-29
PRIOR APPLICATION NUMBER: 60/063870
PRIOR FILING DATE: 1997-10-31
PRIOR APPLICATION NUMBER: 60/064103
PRIOR FILING DATE: 1997-10-31
PRIOR APPLICATION NUMBER: 60/065311
PRIOR FILING DATE: 1997-11-13
PRIOR APPLICATION NUMBER: 60/065120
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: 60/066466
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/066772
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/069335
PRIOR FILING DATE: 1997-12-11
PRIOR APPLICATION NUMBER: 60/069425
PRIOR FILING DATE: 1997-12-12
PRIOR APPLICATION NUMBER: 60/069870
PRIOR FILING DATE: 1997-12-17
PRIOR APPLICATION NUMBER: 60/068017
PRIOR FILING DATE: 1997-12-18
PRIOR APPLICATION NUMBER: 60/077450
PRIOR FILING DATE: 1998-03-10
PRIOR APPLICATION NUMBER: 60/077632
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
PRIOR FILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/078886
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/078939
PRIOR FILING DATE: 1998-03-20
PRIOR APPLICATION NUMBER: 60/079664
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/079786
PRIOR FILING DATE: 1998-03-27
PRIOR APPLICATION NUMBER: 60/080107
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080194
PRIOR FILING DATE: 1998-03-31
PRIOR APPLICATION NUMBER: 60/080327
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/080333
PRIOR FILING DATE: 1998-04-01
PRIOR APPLICATION NUMBER: 60/081049
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081070
PRIOR FILING DATE: 1998-04-08
PRIOR APPLICATION NUMBER: 60/081195
PRIOR FILING DATE: 1998-04-09
PRIOR APPLICATION NUMBER: 60/081838
PRIOR FILING DATE: 1998-04-15
PRIOR APPLICATION NUMBER: 60/082568
PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082569
PRIOR FILING DATE: 1998-04-21
PRIOR APPLICATION NUMBER: 60/082704
PRIOR FILING DATE: 1998-04-22
```

Fri May 7 11:49:14 2004

us-10-009-445a-20.rapb

Page 6

PRIOR APPLICATION NUMBER: 60/082797
PRIOR FILING DATE: 1998-04-22
PRIOR APPLICATION NUMBER: 60/083322
PRIOR FILING DATE: 1998-04-28
PRIOR APPLICATION NUMBER: 60/083495
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083496
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083499
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/083559
PRIOR FILING DATE: 1998-04-29
PRIOR APPLICATION NUMBER: 60/084366
PRIOR FILING DATE: 1998-05-05
PRIOR APPLICATION NUMBER: 60/084414
PRIOR FILING DATE: 1998-05-06
PRIOR APPLICATION NUMBER: 60/084639
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084640
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/084643
PRIOR FILING DATE: 1998-05-07
PRIOR APPLICATION NUMBER: 60/085573
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085579
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085580
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085592
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/085700
PRIOR FILING DATE: 1998-05-15
PRIOR APPLICATION NUMBER: 60/086023
PRIOR FILING DATE: 1998-05-18
PRIOR APPLICATION NUMBER: 60/086392
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/086486
PRIOR FILING DATE: 1998-05-22
PRIOR APPLICATION NUMBER: 60/087098
PRIOR FILING DATE: 1998-05-28
PRIOR APPLICATION NUMBER: 60/087208
PRIOR FILING DATE: 1998-05-28
PRIOR APPLICATION NUMBER: 60/087609
PRIOR FILING DATE: 1998-06-02
PRIOR APPLICATION NUMBER: 60/087759
PRIOR FILING DATE: 1998-06-02
PRIOR APPLICATION NUMBER: 60/087827
PRIOR FILING DATE: 1998-06-03
PRIOR APPLICATION NUMBER: 60/088025
PRIOR FILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088028
PRIOR FILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088029
PRIOR FILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088033
PRIOR FILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088167
PRIOR FILING DATE: 1998-06-05
PRIOR APPLICATION NUMBER: 60/088202
PRIOR FILING DATE: 1998-06-05
PRIOR APPLICATION NUMBER: 60/088212
PRIOR FILING DATE: 1998-06-05
PRIOR APPLICATION NUMBER: 60/088217
PRIOR FILING DATE: 1998-06-05
PRIOR APPLICATION NUMBER: 60/088326
PRIOR FILING DATE: 1998-06-04
PRIOR APPLICATION NUMBER: 60/088655
PRIOR FILING DATE: 1998-06-09
PRIOR APPLICATION NUMBER: 60/088722
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088738
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088740

PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088811
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088824
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088825
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088826
PRIOR FILING DATE: 1998-06-10
PRIOR APPLICATION NUMBER: 60/088861
PRIOR FILING DATE: 1998-06-11
PRIOR APPLICATION NUMBER: 60/088863
PRIOR FILING DATE: 1998-06-11
PRIOR APPLICATION NUMBER: 60/088876
PRIOR FILING DATE: 1998-06-11
PRIOR APPLICATION NUMBER: 60/089090
PRIOR FILING DATE: 1998-06-12
PRIOR APPLICATION NUMBER: 60/089105
PRIOR FILING DATE: 1998-06-12
PRIOR APPLICATION NUMBER: 60/089512
PRIOR FILING DATE: 1998-06-16
PRIOR APPLICATION NUMBER: 60/089514
PRIOR FILING DATE: 1998-06-16
PRIOR APPLICATION NUMBER: 60/089538
PRIOR FILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/089598
PRIOR FILING DATE: 1998-06-17
PRIOR APPLICATION NUMBER: 60/089653

Query Match 99.8%; Score 1843; DB 12; Length 348;
Best Local Similarity 99.7%; Pred. No. 1,6e-167;
Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRFANTGLILITFLVABEAGAOQNNLSIMQTSKRNALASSSICMEKOTON 60
DB 1 MLCPRFANTGLILITFLVABEAGAOQNNLSIMQTSKRNALASSSICMEKOTON 60
QY 61 YSKVLAEVNTSWPYKATNAVLCPPALBNLITITWEILLRQOPSTKAYREINETKE 120
DB 61 YSKVLAEVNTSWPYKATNAVLCPPALBNLITITWEILLRQOPSTKAYREINETKE 120
QY 121 TNCDBERITWVRSDQSDIQRPAITHDGYRCLMTPDQNFHGYHLOVTPPEVL 180
DB 121 TNCDBERITWVRSDQSDIQRPAITHDGYRCLMTPDQNFHGYHLOVTPPEVL 180
QY 181 FQNNRTAVCKAVAGKRAQISMPBGDCATKQWNSNGTVYKSTCHWEHNVSTVCH 240
DB 181 FQNNRTAVCKAVAGKRAQISMPBGDCATKQWNSNGTVYKSTCHWEHNVSTVCH 240
QY 241 VSHLTGNKSLYIELLPVPGAKKSAKIYPIIITITITITVGFIMLKNGCKRYKLNKT 300
DB 241 VSHLTGNKSLYIELLPVPGAKKSAKIYPIIITITITITVGFIMLKNGCKRYKLNKT 300
QY 301 ESTPVEDEDEMOFYASTETKNPLXDTTNVYKASQALQSEVDIDLTL 348
DB 301 ESTPVEDEDEMOFYASTETKNPLXDTTNVYKASQALQSEVDIDLTL 348

RESULT 9
US-10-176-483-494
Sequence 494; Application US/10176483
Publication No US20030017541A1
GENERAL INFORMATION:
APPLICANT: Baker, Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.

APPLICANT: Zhang, Zemin
 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 FILE REFERENCE: P3430R1C68
 CURRENT APPLICATION NUMBER: US/10/176,483
 CURRENT FILING DATE: 2002-06-20
 Prior application removed - See file wrapper or Palm
 NUMBER OF SEQ ID NOS: 612
 SEQ ID NO 494
 LENGTH: 348
 TYPE: PRT
 ORGANISM: Homo Sapien
 US-10-176-483-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
 Best Local Similarity 99.7%; Pred. No. 1.6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITON 60
 DB 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITON 60
 QY 61 YSKVLAENVTSMPVKATNAVLCCPPIALRNLIITWEIIIRGQPSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVKATNAVLCCPPIALRNLIITWEIIIRGQPSCTKAYRKETNETKE 120
 QY 121 TNCIDERITWVSRRPQNSDLQIRPVAITHDGYRCIMVTPDGNFRHGYHLQVLTPEVTL 180
 DB 121 TNCIDERITWVSRRPQNSDLQIRPVAITHDGYRCIMVTPDGNFRHGYHLQVLTPEVTL 180
 QY 181 FQNRRTAVCKAVAGKPAQAQISWIPBGCAATQEWNSGTIVKSTCHWEVHNVSTVCH 240
 DB 181 FQNRRTAVCKAVAGKPAQAQISWIPBGCAATQEWNSGTIVKSTCHWEVHNVSTVCH 240
 QY 241 VSHLTGNKSLYIELLPVPGAKKSATLYPIYIIITIIITIGFIMLLKYNCRKRYKLNKT 300
 DB 241 VSHLTGNKSLYIELLPVPGAKKSATLYPIYIIITIIITIGFIMLLKYNCRKRYKLNKT 300
 QY 301 ESTPVEEDEMOPVASYTEKNNPLVDTNKNKVASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNNPLVDTNKNKVASQALQSEVDTDLHTL 348

RESULT 10
 US-10-176-749-494
 Sequence 494, Application US/10176749
 Publication No. US20030017542A1

GENERAL INFORMATION:
 APPLICANT: Baker, Kevin P.
 APPLICANT: Chen, Jian
 APPLICANT: Desnoyers, Luc
 APPLICANT: Goddard, Audrey
 APPLICANT: Godowski, Paul J.
 APPLICANT: Gurney, Austin L.
 APPLICANT: Pan, James
 APPLICANT: Smith, Victoria
 APPLICANT: Watanabe, Colin K.
 APPLICANT: Wood, William I.
 APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 FILE REFERENCE: P3430R1C68
 CURRENT APPLICATION NUMBER: US/10/176,749
 CURRENT FILING DATE: 2002-06-20
 Prior application removed - See file wrapper or Palm
 NUMBER OF SEQ ID NOS: 612
 SEQ ID NO 494
 LENGTH: 348
 TYPE: PRT
 ORGANISM: Homo Sapien
 US-10-176-749-494

Query Match 99.8%; Score 1843; DB 12; Length 348;

Best Local Similarity 99.7%; Pred. No. 1.6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITON 60
 DB 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITON 60
 QY 61 YSKVLAENVTSMPVKATNAVLCCPPIALRNLIITWEIIIRGQPSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVKATNAVLCCPPIALRNLIITWEIIIRGQPSCTKAYRKETNETKE 120
 QY 121 TNCIDERITWVSRRPQNSDLQIRPVAITHDGYRCIMVTPDGNFRHGYHLQVLTPEVTL 180
 DB 121 TNCIDERITWVSRRPQNSDLQIRPVAITHDGYRCIMVTPDGNFRHGYHLQVLTPEVTL 180
 QY 181 FQNRRTAVCKAVAGKPAQAQISWIPBGCAATQEWNSGTIVKSTCHWEVHNVSTVCH 240
 DB 181 FQNRRTAVCKAVAGKPAQAQISWIPBGCAATQEWNSGTIVKSTCHWEVHNVSTVCH 240
 QY 241 VSHLTGNKSLYIELLPVPGAKKSATLYPIYIIITIIITIGFIMLLKYNCRKRYKLNKT 300
 DB 241 VSHLTGNKSLYIELLPVPGAKKSATLYPIYIIITIIITIGFIMLLKYNCRKRYKLNKT 300
 QY 301 ESTPVEEDEMOPVASYTEKNNPLVDTNKNKVASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNNPLVDTNKNKVASQALQSEVDTDLHTL 348

RESULT 11
 US-10-176-914-494
 Sequence 494, Application US/10176914
 Publication No. US20030017543A1

GENERAL INFORMATION:
 APPLICANT: Baker, Kevin P.
 APPLICANT: Chen, Jian
 APPLICANT: Desnoyers, Luc
 APPLICANT: Goddard, Audrey
 APPLICANT: Godowski, Paul J.
 APPLICANT: Gurney, Austin L.
 APPLICANT: Pan, James
 APPLICANT: Smith, Victoria
 APPLICANT: Watanabe, Colin K.
 APPLICANT: Wood, William I.
 APPLICANT: Zhang, Zemin

TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 FILE REFERENCE: P3430R1C68
 CURRENT APPLICATION NUMBER: US/10/176,914
 CURRENT FILING DATE: 2002-06-20
 Prior application removed - See file wrapper or Palm
 NUMBER OF SEQ ID NOS: 612
 SEQ ID NO 494
 LENGTH: 348
 TYPE: PRT
 ORGANISM: Homo Sapien
 US-10-176-914-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
 Best Local Similarity 99.7%; Pred. No. 1.6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITON 60
 DB 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEDEKQITON 60
 QY 61 YSKVLAENVTSMPVKATNAVLCCPPIALRNLIITWEIIIRGQPSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVKATNAVLCCPPIALRNLIITWEIIIRGQPSCTKAYRKETNETKE 120
 QY 121 TNCIDERITWVSRRPQNSDLQIRPVAITHDGYRCIMVTPDGNFRHGYHLQVLTPEVTL 180
 DB 121 TNCIDERITWVSRRPQNSDLQIRPVAITHDGYRCIMVTPDGNFRHGYHLQVLTPEVTL 180

QY 181 FQNNRTAVCAVAGKPAQISWIEGDCATKQEWNSGTVTKSTCHEVANSVTYCH 240
 DB 181 FQNNRTAVCAVAGKPAQISWIEGDCATKQEWNSGTVTKSTCHEVANSVTYCH 240
 QY 241 VSHLTGNSLYTELLPVPAGAKSAKLYPIYIIITIIITVGFIMLLKVNCGCRKYLKNT 300
 DB 241 VSHLTGNSLYTELLPVPAGAKSAKLYPIYIIITIIITVGFIMLLKVNCGCRKYLKNT 300
 QY 301 ESTPVEEDEMOPVASYTEKNNPLYDTTNKVKASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNNPLYDTTNKVKASQALQSEVDTDLHTL 348

RESULT 12
 US-10-176-915-494
 ; Sequence 494, Application US/10176915
 ; Publication No. US20030017544A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Baker, Kevin P.
 ; APPLICANT: Chen, Jian
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Pan, James
 ; APPLICANT: Smith, Victoria
 ; APPLICANT: Watanabe, Colin K.
 ; APPLICANT: Wood, William I.
 ; APPLICANT: Zhang, Zemin
 ; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 ; FILE REFERENCE: P3430R1C10
 ; CURRENT APPLICATION NUMBER: US/10/176,915
 ; PRIORITY FILING DATE: 2002-06-21
 ; NUMBER OF SEQ ID NOS: 612
 ; Prior Application removed - See File Wrapper or Palm
 ; SEQ ID NO 494
 ; LENGTH: 348
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 US-10-176-915-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
 Best Local Similarity 99.7%; Pred. No. 1,6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MLCWRTANIGLLIIITFIVAEAGAAOPNNSIMLOTSEKNAALASSLCMDKQITON 60
 DB 1 MLCWRTANIGLLIIITFIVAEAGAAOPNNSIMLOTSEKNAALASSLCMDKQITON 60
 QY 61 YSKYLAENVTSWPKMATNVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 DB 61 YSKYLAENVTSWPKMATNVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 QY 121 TNCIDERTIWSRPDQNSDIQIRPAITHDGYRCINWTPDGNFHRGYHQLVLTPEVTL 180
 DB 121 TNCIDERTIWSRPDQNSDIQIRPAITHDGYRCINWTPDGNFHRGYHQLVLTPEVTL 180
 QY 181 FQNNRTAVCAVAGKPAQISWIEGDCATKQEWNSGTVTKSTCHEVANSVTYCH 240
 DB 181 FQNNRTAVCAVAGKPAQISWIEGDCATKQEWNSGTVTKSTCHEVANSVTYCH 240
 QY 241 VSHLTGNSLYTELLPVPAGAKSAKLYPIYIIITIIITVGFIMLLKVNCGCRKYLKNT 300
 DB 241 VSHLTGNSLYTELLPVPAGAKSAKLYPIYIIITIIITVGFIMLLKVNCGCRKYLKNT 300
 QY 301 ESTPVEEDEMOPVASYTEKNNPLYDTTNKVKASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNNPLYDTTNKVKASQALQSEVDTDLHTL 348

RESULT 13
 US-10-176-484-494

; Sequence 494, Application US/10176484
 ; Publication No. US20030059876A3
 ; GENERAL INFORMATION:
 ; APPLICANT: Baker, Kevin P.
 ; APPLICANT: Chen, Jian
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Pan, James
 ; APPLICANT: Smith, Victoria
 ; APPLICANT: Watanabe, Colin K.
 ; APPLICANT: Wood, William I.
 ; APPLICANT: Zhang, Zemin
 ; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 ; FILE REFERENCE: P3430R1C64
 ; CURRENT APPLICATION NUMBER: US/10/176,484
 ; PRIORITY FILING DATE: 2002-06-20
 ; Prior Application removed - See File Wrapper or Palm
 ; NUMBER OF SEQ ID NOS: 612
 ; SEQ ID NO 484
 ; LENGTH: 348
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 US-10-176-484-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
 Best Local Similarity 99.7%; Pred. No. 1,6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 QY 1 MLCWRTANIGLLIIITFIVAEAGAAOPNNSIMLOTSEKNAALASSLCMDKQITON 60
 DB 1 MLCWRTANIGLLIIITFIVAEAGAAOPNNSIMLOTSEKNAALASSLCMDKQITON 60
 QY 61 YSKYLAENVTSWPKMATNVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 DB 61 YSKYLAENVTSWPKMATNVLCCPPIALRNLIITWEIILRGQPSCTKAYRKETNETKE 120
 QY 121 TNCIDERTIWSRPDQNSDIQIRPAITHDGYRCINWTPDGNFHRGYHQLVLTPEVTL 180
 DB 121 TNCIDERTIWSRPDQNSDIQIRPAITHDGYRCINWTPDGNFHRGYHQLVLTPEVTL 180
 QY 181 FQNNRTAVCAVAGKPAQISWIEGDCATKQEWNSGTVTKSTCHEVANSVTYCH 240
 DB 181 FQNNRTAVCAVAGKPAQISWIEGDCATKQEWNSGTVTKSTCHEVANSVTYCH 240
 QY 241 VSHLTGNSLYTELLPVPAGAKSAKLYPIYIIITIIITVGFIMLLKVNCGCRKYLKNT 300
 DB 241 VSHLTGNSLYTELLPVPAGAKSAKLYPIYIIITIIITVGFIMLLKVNCGCRKYLKNT 300
 QY 301 ESTPVEEDEMOPVASYTEKNNPLYDTTNKVKASQALQSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPVASYTEKNNPLYDTTNKVKASQALQSEVDTDLHTL 348

RESULT 14
 US-10-180-550-494
 ; Sequence 494, Application US/10180550
 ; Publication No. US2003006440A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Baker, Kevin P.
 ; APPLICANT: Chen, Jian
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Goddard, Audrey
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Pan, James
 ; APPLICANT: Smith, Victoria
 ; APPLICANT: Watanabe, Colin K.
 ; APPLICANT: Wood, William I.
 ; APPLICANT: Zhang, Zemin
 ; TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC

TITLE OF INVENTION: ACIDS ENCODING THE SAME
 FILE REFERENCE: P3430R1C149
 CURRENT APPLICATION NUMBER: US/10/180,550
 CURRENT FILING DATE: 2002-06-25
 Prior application removed - See file wrapper or Palm
 NUMBER OF SEQ ID NOS: 612
 SEQ ID NO 494
 LENGTH: 348
 TYPE: PRT
 ORGANISM: Homo Sapien
 US-10-180-550-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
 Best Local Similarity 99.7%; Pred. No. 1.6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSMLQTSKENHALASSSLCMEDEKQITON 60
 DB 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSMLQTSKENHALASSSLCMEDEKQITON 60
 QY 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGOPSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGOPSCTKAYRKETNETKE 120
 QY 121 TNCIDERITWVSRRPDQNSDLQIRPVALTHDGYRCIMVTPDGNFRGHYLOVLVPEVTL 180
 DB 121 TNCIDERITWVSRRPDQNSDLQIRPVALTHDGYRCIMVTPDGNFRGHYLOVLVPEVTL 180
 QY 181 FQNRRTAVCKAVAGKPAQISWIPGDCATKOEYWSNGTVTKSTCHWEVHNVSTVCH 240
 DB 181 FQNRRTAVCKAVAGKPAQISWIPGDCATKOEYWSNGTVTKSTCHWEVHNVSTVCH 240
 QY 241 VSHLTGNKSLYIELLPVPAKKSARKLYPIYIIITIIITVGFIMLKNGCRKXKNT 300
 DB 241 VSHLTGNKSLYIELLPVPAKKSARKLYPIYIIITIIITVGFIMLKNGCRKXKNT 300
 QY 301 ESTPVEEDEMOPYASYTEKNNPLYDTTNKVASQALOSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPYASYTEKNNPLYDTTNKVASQALOSEVDTDLHTL 348

RESULT 15
 US-10-183-014-494
 Sequence 494, Application US/10183014
 Publication No. US2003006441A1
 GENERAL INFORMATION:
 APPLICANT: Baker, Kevin P.
 APPLICANT: Chen, Jian
 APPLICANT: Desnoyers, Luc
 APPLICANT: Goddard, Audrey
 APPLICANT: Godowski, Paul J.
 APPLICANT: Gurney, Austin L.
 APPLICANT: Pan, James
 APPLICANT: Smith, Victoria
 APPLICANT: Watanabe, Colin K.
 APPLICANT: Wood, William I.
 APPLICANT: Zhang, Zemin
 TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
 FILE REFERENCE: P3430R1C170
 CURRENT APPLICATION NUMBER: US/10/183,014
 CURRENT FILING DATE: 2002-06-26
 Prior application removed - See file wrapper or Palm
 NUMBER OF SEQ ID NOS: 612
 SEQ ID NO 494
 LENGTH: 348
 TYPE: PRT
 ORGANISM: Homo Sapien
 US-10-183-014-494

Query Match 99.8%; Score 1843; DB 12; Length 348;
 Best Local Similarity 99.7%; Pred. No. 1.6e-167;
 Matches 347; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

QY 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSMLQTSKENHALASSSLCMEDEKQITON 60
 DB 1 MLCPRRTANLGLLILITFLVAEAGAAQPNNSMLQTSKENHALASSSLCMEDEKQITON 60
 QY 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGOPSCTKAYRKETNETKE 120
 DB 61 YSKVLAENVTSMPVMAATNAVLCCPPIALRNLIITWEIILRGOPSCTKAYRKETNETKE 120
 QY 121 TNCIDERITWVSRRPDQNSDLQIRPVALTHDGYRCIMVTPDGNFRGHYLOVLVPEVTL 180
 DB 121 TNCIDERITWVSRRPDQNSDLQIRPVALTHDGYRCIMVTPDGNFRGHYLOVLVPEVTL 180
 QY 181 FQNRRTAVCKAVAGKPAQISWIPGDCATKOEYWSNGTVTKSTCHWEVHNVSTVCH 240
 DB 181 FQNRRTAVCKAVAGKPAQISWIPGDCATKOEYWSNGTVTKSTCHWEVHNVSTVCH 240
 QY 241 VSHLTGNKSLYIELLPVPAKKSARKLYPIYIIITIIITVGFIMLKNGCRKXKNT 300
 DB 241 VSHLTGNKSLYIELLPVPAKKSARKLYPIYIIITIIITVGFIMLKNGCRKXKNT 300
 QY 301 ESTPVEEDEMOPYASYTEKNNPLYDTTNKVASQALOSEVDTDLHTL 348
 DB 301 ESTPVEEDEMOPYASYTEKNNPLYDTTNKVASQALOSEVDTDLHTL 348

Search completed: May 7, 2004, 11:48:07
 Job time : 49 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 7, 2004, 11:38:44 ; Search time 20 seconds
(without alignments)
1573.733 Million cell updates/sec

Title: US-10-009-445A-20

Perfect score: 1846

Sequence: 1 MLCWRTANGLILITLITFL.....NKVASQALQSEVDTLHTL 348

Scoring table:

Gapop 10.0 , Gapext 0.5

Searched: 283366 seqs, 96191526 residues

Total number of hits satisfying chosen parameters: 283366

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : PIR 76:*
1: PIR1:*
2: PIR2:*
3: PIR3:*
4: PIR4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	131	7.1	1091	2 A58532	glial cell membran
2	125.5	6.8	467	1 HLMSP3	poliovirus recepto
3	125.5	6.8	478	2 I53960	PRR2 alpha - human
4	125.5	6.8	530	2 A53437	poliovirus recepto
5	125.5	6.8	538	2 I68093	PRR2 delta - human
6	125	6.8	750	2 S41051	fibroblast growth
7	122.5	6.6	853	1 IUBONC	neural cell adhesi
8	120	6.5	761	1 ITRUNG	neural cell adhesi
9	119.5	6.5	330	2 I46391	CD66 precursor - r
10	117.5	6.3	811	2 A41054	fasciilin II, tran
11	117	6.3	873	2 B41054	fasciilin II PI-11
12	117	6.3	1091	1 IUCHNL	neural cell adhesi
13	115.5	6.3	392	1 RWHUPD	poliovirus recepto
14	115.5	6.3	417	1 RWHUPA	poliovirus recepto
15	115	6.2	1257	1 A41050	neural cell adhesi
16	114.5	6.2	487	1 S65133	butyrophilin - mou
17	114.5	6.2	858	1 IURINC	neural cell adhesi
18	114	6.2	682	2 A35969	heparin-binding gr
19	112	6.1	483	2 T17346	hypothetical prote
20	112	6.1	5175	2 T20992	hypothetical prote
21	112	6.1	5198	2 T43290	hemocentin precurs
22	111	6.0	748	2 S41050	fibroblast growth
23	110.5	6.0	407	2 T08732	hypothetical prote
24	110.5	6.0	725	1 IUMSNG	neural cell adhesi
25	110.5	6.0	1115	1 IUMSNT	neural cell adhesi
26	109	5.9	824	2 S36439	fibroblast growth
27	105.5	5.7	392	2 B44194	poliovirus recepto
28	105.5	5.7	417	2 A44194	poliovirus recepto
29	105.5	5.7	538	2 JC2457	vascular cell adhe

30	105.5	5.7	1070	2 JC4593	protein-tyrosine k
31	104.5	5.7	274	2 A47639	Ox-2 membrane glyco
32	104.5	5.7	769	2 S16236	fibroblast growth
33	104.5	5.7	822	2 A45081	fibroblast growth
34	104.5	5.7	822	2 A41794	keratinocyte growth
35	103.5	5.6	1033	2 S15247	cell adhesion prot
36	102.5	5.6	338	2 JC1238	opioid-binding pro
37	101.5	5.5	526	2 S70587	butyrophilin precu
38	101	5.5	1051	2 A39712	kinase-like protei
39	100.5	5.4	789	2 T28715	hypothetical prote
40	100.5	5.4	1355	2 T28715	hypothetical prote
41	100	5.4	821	1 TWHUP2	fibroblast growth
42	99.5	5.4	824	2 S24108	protein-tyrosine k
43	99	5.4	862	2 I49583	differentiation an
44	98.5	5.3	345	2 S03199	Op10d-binding pro
45	98	5.3	278	1 TDRTOX	Ox-2 membrane glyco

ALIGNMENTS

RESULT 1

A58532

Glial cell membrane glycoprotein lig-1 precursor - mouse

C/Species: Mus musculus (house mouse)

C/Date: 11-Apr-1997 #sequence_revision 11-Apr-1997 #text_change 05-Nov-1999

C/Accession: A58532

R/Suzuki, Y.; Sato, N.; Tohyama, M.; Wanka, A.; Takagi, T.

J. Biol. Chem. 271, 22522-22527, 1996

A/Title: CDNA cloning of a novel membrane glycoprotein that is expressed specifically in

A/Reference number: A58532, NCID:96394313, PMID:8798419

A/Accession: A58532

A/Status: Preliminary; translated from GB/EMBL/DBJ

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

A/Residues: 1-1091 <SU2>

Db 770 PIGTERAHSQSLIPRPGKRGDTTGITTAIVCSIVLISLVWICITVQRKXSEESV 829

QY 298 NKTESTPVEDEMDOPASYTEKNPLDYTNKV 331

Db 830 TWTDET-IVPD-----VPSYLSQGLSPDRQETV 858

RESULT 2

HLMSP3

POLIOVIRUS RECEPTOR HOMOLOGY PRECURSOR - mouse

C/Species: Mus musculus domesticus (western European house mouse)

C/Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 22-Jun-1999

C/Accession: A38211

R/Morrison, M.E.; Racanelli, V.R.

J/Virology 66:2807-2813, 1992

A/Title: Molecular cloning and expression of a murine homolog of the human poliovirus receptor

A/Reference number: A38211; MIMD:92219365; PMID:1560525

A/Accession: A38211

A/Molecule type: DNA

A/Residues: 1-467 <MOR>

A/Cross-references: GB:M80206; NID:G199785; PIDN:AAA9734.1; PID:G199786

C/Superfamily: poliovirus receptor; immunoglobulin homology

C/Keywords: duplication; glycoprotein; transmembrane protein

F/1-25/Domain: signal sequence #status predicted <SIG>

F/26-467/Product: poliovirus receptor homolog #status predicted <MAT>

F/26-354/Domain: extracellular #status predicted <EXT>

F/47-133/Domain: immunoglobulin homology <IMM1>

F/167-231/Domain: immunoglobulin homology <IMM2>

F/267-322/Domain: immunoglobulin homology <IMM3>

F/355-374/Domain: transmembrane #status predicted <TMN>

F/375-467/Domain: intracellular #status predicted <INT>

F/4-131,174-229,274-320/Disulfide bonds: #status predicted

F/128,138,315/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 6.8%; Score 125.5; DB 1; Length 467;

Best Local Similarity 26.2%; Pred. No. 0.013;

Matches 59; Conservative 37; Mismatches 82; Indels 47; Gaps 14;

QY 63 KVLAEVNTSWPVKATNAVLCC--PPILRLNLIITWE-----ILRQPSCTKAYRKE 114

Db 37 RVLPEVRG---RLGGTVELPCHLPPPTTR--VSQVTWQLDGTVAAPHFPSGVDF-- 88

QY 115 TNETKENCDEIRITWY--SRPDNSDLO-----IRPAITHDGYRCIMWT--PDGNFRG 167

Db 89 ----PNSQPSKDLSTFRARPEFTNADRLATLAFRLGRVDEGNYTCERATFPNGRRGV 144

QY 168 YHLQVLVTP-----EVLTFQNRNRTAVCKAVAGKPAQISWPE--GDCAITQOEYW-S 217

Db 145 TWLRVIAQPEHNAEAQEVITIGPQSAVAVACVSTGGRPPARITWISLGGKADQDEPGIQ 204

QY 218 NGVTVKSTCHMEVHNVS-----TVTCHVSHLGNKSLVIELPV 257

Db 205 AGTVITIS--RYSLVPGRADGVKVTGRVHESFEETP---LPLV 244

RESULT 3

I53960

PRR2 alpha - human

C/Species: Homo sapiens (man)

C/Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 21-Jan-2000

C/Accession: I53960

R/Eberle, F.; Dubreuil, P.; Mattei, M.G.; Devillard, E.; Lopez, M.

Gene 159, 267-272, 1995

A/Title: The human PRR2 gene, related to the human poliovirus receptor gene (PVR), is th

A/Reference number: I53960; MIMD:95347610; PMID:7622062

A/Accession: I53960

A/Status: preliminary; translated from GB/EMBL/DBD3

A/Molecule type: mRNA

A/Residues: 1-478 <RES>

A/Cross-references: GB:G79171; NID:G1042202; PID:G1042203

C/Genetics:

A/Gene: PRR2alpha

C/Superfamily: poliovirus receptor; immunoglobulin homology

F/276-331/Domain: immunoglobulin homology <IMM>

Query Match 6.8%; Score 125.5; DB 2; Length 478;

Best Local Similarity 24.7%; Pred. No. 0.013;

Matches 53; Conservative 32; Mismatches 87; Indels 43; Gaps 9;

QY 63 KVLAEVNTSWPVKATNAVLCC--PPILRLNLIITWEIILNGPSCTKAYR----- 112

Db 37 QVLPEVRG---RLGGTVELPCHLPPVPLGLYSLVWQ-----RDPANHQNVAAPHF 87

QY 113 KENETKENCDEIRITWY--SRPDNSDLO-----QNSDLOIRPAITHDGYRCIMWT--PD 161

Db 88 KMGSPSPKPSRGSERLFSVAKQSTQDTEALQDATALHGLTVDEGNYTCERATFPK 147

QY 162 GNFRGYHLQVLVTP-----EVLTFQNRNRTAVCKAVAGKPAQISWPEGDCAITQOE 214

Db 148 GSVKGMWLVIAKPKQAQAQVTSQDEPTVALCISKGRPPARITWISLGGKADQDEPGIK 207

QY 215 YMSV---GTVTVKSTCHMEVHNVS-----TVTCHVSH 243

Db 208 QVSGTLAGTVITVSRFTLVPSGRADGVTVCKVEH 242

RESULT 4

A53437

POLIOVIRUS RECEPTOR MPVR - mouse

C/Species: Mus musculus (house mouse)

C/Date: 06-Oct-1994 #sequence_revision 18-Nov-1994 #text_change 20-Jun-2000

C/Accession: A53437

R/Aoki, J.; Koike, S.; Ise, I.; Sato-Yoshida, Y.; Nomoto, A.

J/Biol. Chem. 269, 8431-8438, 1994

A/Title: Amino acid residues on human poliovirus receptor involved in interaction with

A/Reference number: A53437; MIMD:94179228; PMID:8132559

A/Accession: A53437

A/Status: preliminary

A/Molecule type: mRNA

A/Residues: 1-530 <AOK>

A/Cross-references: GB:D26107; NID:G475017; PIDN:BA05103.1; PID:G825507

A/Experimental source: C57/BL6, brain

A/Note: sequence extracted from NCBI database (NCBI:146664, NCBI:146667)

C/Superfamily: poliovirus receptor; immunoglobulin homology

F/47-133/Domain: immunoglobulin homology <IMM>

Query Match 6.8%; Score 125.5; DB 2; Length 530;

Best Local Similarity 26.2%; Pred. No. 0.015;

Matches 59; Conservative 37; Mismatches 82; Indels 47; Gaps 14;

QY 63 KVLAEVNTSWPVKATNAVLCC--PPILRLNLIITWE-----ILRQPSCTKAYRKE 114

Db 37 RVLPEVRG---RLGGTVELPCHLPPPTTR--VSQVTWQLDGTVAAPHFPSGVDF-- 88

QY 115 TNETKENCDEIRITWY--SRPDNSDLO-----IRPAITHDGYRCIMWT--PDGNFRG 167

Db 89 ----PNSQPSKDLSTFRARPEFTNADRLATLAFRLGRVDEGNYTCERATFPNGRRGV 144

QY 168 YHLQVLVTP-----EVLTFQNRNRTAVCKAVAGKPAQISWPE--GDCAITQOEYW-S 217

Db 145 TWLRVIAQPEHNAEAQEVITIGPQSAVAVACVSTGGRPPARITWISLGGKADQDEPGIQ 204

QY 218 NGVTVKSTCHMEVHNVS-----TVTCHVSHLGNKSLVIELPV 257

Db 205 AGTVITIS--RYSLVPGRADGVKVTGRVHESFEETP---LPLV 244

RESULT 5

I6093

PRR2 delta - human

C/Species: Homo sapiens (man)

C/Date: 29-May-1998 #sequence_revision 29-May-1998 #text_change 21-Jan-2000

C/Accession: I6093

R/Eberle, F.; Dubreuil, P.; Mattei, M.G.; Devillard, E.; Lopez, M.

Gene 159, 267-272, 1995

A/Title: The human PRR2 gene, related to the human poliovirus receptor gene (PVR), is c

A:Reference number: I53960; MUID:95347610; PMID:7622062
A:Accession: I68093
A:Status: Preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-538 <RES>
A:Cross-references: GB:S79172; NID:G1042204; PID:G1042205
C:Genetics
A:Gene: FRKdelta
C:Superfamily: poliovirus receptor; immunoglobulin homology
F:276-331/Domain: immunoglobulin homology <IMM>

Query Match 6.8%; Score 125.5; DB 2; Length 538;
Best Local Similarity 24.7%; Pred. No. 0.015; Indels 43; Gaps 9;
Matches 53; Conservative 32; Mismatches 87;

QY 63 KYLAENVTSWEKXATNAVLCC---PPLAKNLIITWEILLRGQPSCTKAYR-----112
DB 37 QVLPEVRG---QLGGTVELPCHLPVPGLYISLWQO---RPDAPAHQVAAFP 87
QY 113 KETNETKNTCTDRITVSRPD-----QNSDLQIRPAITHDGYRCIMT-PD 161
DB 88 KMGDSFSPKPGSESLSFVSAKOSTGQDTEALDATALHGLTVEDEGNTCEPATPK 147
QY 162 GNFRGHLYQVLTPE-----EYTLFQNRRTAVCKAVAGKPAQISWIPEDCATKOE 214
DB 148 GSVAGMTLRYIAKPKQAEAKQTFSDPTTVALCISKGRPPARISWLSLDWAKET 207
QY 215 YWSN---GTVTAKSTCWEVHNV---TVTCHVSH 243
DB 208 QVSGTLAGTVTYSRFLTVPSGRADGVTVTCKVEH 242

RESULT 6
S41051
fibroblast growth factor receptor-2 - eastern newt
C:Species: Notophthalmus viridescens, Triturus viridescens (eastern newt)
C:Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 21-Jan-2000
C:Accession: S41051
R:Poulin, M.L.; Chiu, I.M.
Biochim. Biophys. Acta 1220, 209-211, 1994
A:Title: Nucleotide sequences of two new (Notophthalmus viridescens) fibroblast growth
A:Reference number: S41050; MUID:94146117; PMID:8312364
A:Accession: S41051
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-750 <POU>
C:Superfamily: basic fibroblast growth factor receptor 1; immunoglobulin homology; prote
F:101-162/Domain: immunoglobulin homology <IMM>
F:408-693/Domain: protein kinase homology <KIN>

Query Match 6.8%; Score 125; DB 2; Length 750;
Best Local Similarity 22.0%; Pred. No. 0.025;
Matches 89; Conservative 54; Mismatches 151; Indels 110; Gaps 20;

QY 10 LGILLIITFLVAEFGAQQNNLSMLQTSKEMALSSSCMEKQITQ-----NYSK 63
DB 27 MGLVVAATVTL---SLARPSYNAEDTLEPEDANSSGDDEDDNGSEDFITDNNHR 81
QY 64 VLAENVTS-----WPKATNAVLCPPIALRNLIITWEILLRGQPSCTKAYRKETNE 117
DB 82 APYMTNTEKLEKLAHVAANTVTKRCP-----AGNPTPSMRWLKNGKE 126
QY 118 TKEINCTERTITWSRPQNSDQIRPAITHDGYRCIMTPOGNTRHGLQVLT-TP 176
DB 127 FKQ---EHRIGGFYRSQHSLINESVPSDEGTYCTIMENEXGSIINTHTLIDVRSR 182
QY 177 EYTLFQ---NRNRTA-----VCKAVAGKPAQISWI-----PEGD---CAT 211
DB 183 HRPITQAGIPANTTKVNGDAFVCK-VYSDAQPHICWIRFELNGSKIGDGHPIYKVL 241
QY 212 KOEWSNGTIVYKSTCWEVHNVSTV---TCHVSHITG---NKSLEYELLVPVGAACKSA 264
DB 242 KSGINSNAEYLT---LHNVTEADAGQYTCVSNYIGBANOSAWLTVLPASEKDEER 296

QY 265 KL-----YIPYILITLITIVGFILMLKNGCRK-----YKLNKTESPTV- 305
DB 297 ELDSSEYEYEAIVCYGGLITCMIGTIVWCHMKGRGKSDSPFAVKLSK--SLPLR 354
QY 306 ----VEDEMGYPASYTEKNPNFLDTNKVKASQALQSPVDL 345
DB 355 RQVTVSADS-----SSSMNSNTPV-----VRITRLSSNNDTHL 388

RESULT 7

UBONC
neural cell adhesion molecule short domain form precursor - bovine
N:Alternate names: NCAM-140
C:Species: Bos primigenius taurus (cattle)
C:Date: 31-Mar-1993 #sequence_revision 31-Mar-1993 #text_change 22-Jun-1999
C:Accession: A32976; A38778; B44290; S05402
R:Lipkin, V.M.; Khramtsov, N.V.; Andreeva, S.G.; Moshnyakov, M.V.; Petukhova, G.V.; Rak
FEBS Lett. 254, 69-73, 1989

A:Title: Calmodulin-independent bovine brain adenylate cyclase. Amino acid sequence and
A:Reference number: A32976; MUID:89378239; PMID:2776887
A:Accession: A32976
A:Molecule type: mRNA
A:Residues: 1-853 <LIP>
A:Cross-references: GB:X16451; NID:960; PIDN:CAA34470.1; PID:961

A:Accession: A38778
A:Molecule type: protein
A:Residues: 20-35;51-61;113-117;122-147;155-161;262-275;279-302;353-360;369-382;544-552
A:Note: The authors identified this protein as calmodulin-independent adenylate cyclase
R:Xu, G.; Marshak, D.R.
J. Biol. Chem. 261, 3396-3401, 1986

A:Title: Structural and immunological characterization of the amino-terminal domain of r
A:Reference number: A44290; MUID:86140120; PMID:3512556
A:Accession: B44290

A:Molecule type: protein
A:Residues: 20-36 <ROU>
A:Note: 23-Glu was also found

C:Comment: NCAM mediates cell-cell adhesion via homophilic binding with another NCAM mo
C:Superfamily: Various forms of NCAM are produced by alternative splicing.
C:Keywords: neural cell adhesion molecule; fibronectin type III repeat homology; imm

F:1-19/Domain: signal sequence #status predicted <SIG>
F:20-853/Product: neural cell adhesion molecule, short domain form #status experimental
F:20-719/Domain: extracellular #status predicted <EXT>
F:34-98/Domain: immunoglobulin homology <IMM1>
F:132-191/Domain: immunoglobulin homology <IMM2>
F:152-156/Region: heparin binding #status predicted

F:161-165/Region: heparin binding #status predicted
F:228-288/Domain: immunoglobulin homology <IMM3>
F:261-270/Region: NCAM binding #status predicted
F:321-396/Domain: immunoglobulin homology <IMM4>
F:428-490/Domain: immunoglobulin homology <IMM5>

F:527-604/Domain: fibronectin type III repeat homology <IMM6>
F:633-694/Domain: fibronectin type III repeat homology <IMM7>
F:720-737/Domain: transmembrane #status predicted <TM>
F:738-853/Domain: intracellular #status predicted <INT>

F:41-96;139-189;235-286;328-344;435-488/Disulfide bonds: #status predicted
F:222;314;346;432;458;487/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 6.6%; Score 122.5; DB 1; Length 853;
Best Local Similarity 22.2%; Pred. No. 0.047;
Matches 65; Conservative 39; Mismatches 102; Indels 87; Gaps 13;

QY 31 NNSLMQTSK-----ENHALASSSLCMEKQITQ-----YKYLAEVNTSWP 73
DB 171 NNYLQIRGKTKDEGTGRCGRILNGLNFKDQIVAVPPTVOARQSI VAPATLQGS 230
QY 74 VKMATNAVLCPPIALRNLIITWEILLRGQPSCTKAYRKETNETCTERTITVSR 133
DB 231 VTLVCNA-----EGPEPTYSWTKDQGLR-NEEDEKYL-F--- 264
QY 134 PDQNSDLQIRPAITHDGYRCIMTVPDGNFRHGLQVLTVPVTLFQNRKR----- 186

Db 265 SDOSELTIRKVDKNDKBAEVYCAIENKAGQDASIHAKYFAKPIYVENQJAMELEBOV 324
QY 187 TAVCKAVAGPAQAOIWMIPBGDCATKOE---YWS-----NGTVKSTCHMEVHNST 236
Db 325 TLTCFA-SGDPISITWSTRTNISTSEKASWTRPEKQSTLDGHMVVASHA-----RVSS 378
QY 237 VT-----CHVSHLNG--NKSLEYIELLPVPAKKSAAKUYIPYIILT 274
Db 379 LTKSIQYTDAGRYVCTASVTIGDSQSWLYEVQYAP-----KLGQPVAVYT 425

RESULT 8

neural cell adhesion molecule 1 GPI-anchored splice form precursor, muscle-specific - hu
N:Alternate names: CD56; NCAM-120
C/Species: Homo sapiens (man)
C/Date: 31-Mar-1993 #sequence_rev150 31-Mar-1993 #text_change 28-Jan-2000
C/Accession: S07784; A26883
R/Barton, C.H.; Dickson, G.; Gower, H.J.; Rowett, L.H.; Putt, W.; Elsom, V.; Moore, S.E.
Development 104, 165-173, 1988
A/Title: Complete sequence and in vitro expression of a tissue-specific phosphatidylinositol
A/Reference number: S07784; PMID:89305258; PMID:3353057
A/Accession: S07784
A/Molecule type: mRNA
A/Residues: 1761 <BAR>
A/Cross-references: EMBL:X16841; NID:G35005; PIDN:CAA34739.1; PID:G35006
R/Dickson, G.; Gower, H.J.; Barton, C.H.; Prentice, H.M.; Elsom, V.L.; Moore, S.E.; Cox,
Cell 50, 119-1130, 1987
A/Title: Human muscle neural cell adhesion molecule (N-CAM): identification of a muscle-
A/Reference number: A90895; PMID:87301755; PMID:2887295
A/Accession: A26883
A/Molecule type: mRNA
A/Residues: 421-761 <DIC>
A/Cross-references: GB:M17409; NID:G189097; PIDN:AAA59912.1; PID:G386979
C/Comment: NCM mediates cell-cell adhesion via homophilic binding with another NCM mol
C/Comment: Various forms of NCM are produced by alternative splicing.
C/Genetics:

A/Genes: GDB:NCAM1; NCAM; CD56
A/Cross-references: GDB:119448; OMIM:116930
A/Map position: 11q22.2-11q22.3
C/Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immu
C/Keywords: alternative splicing; cell adhesion; duplication; heparin binding; membrane
F:1-19/Domain: signal sequence #status predicted <Sig>
F:20-761/Product: neural cell adhesion molecule phosphatidylinositol-linked form, muscle
F:34-98/Domain: immunoglobulin homology <IMM1>
F:132-191/Domain: immunoglobulin homology <IMM2>
F:152-156/Region: heparin binding #status predicted
F:161-165/Region: heparin binding #status predicted
F:228-289/Domain: immunoglobulin homology <IMM3>
F:263-272/Region: NCAM binding #status predicted
F:332-387/Domain: immunoglobulin homology <IMM4>
F:419-481/Domain: immunoglobulin homology <IMM5>
F:489-587/Domain: fibronectin type III repeat homology #status atypical <FN3>
F:633-720/Domain: fibronectin type III repeat homology #status atypical <FN3>
F:741-96/Region: fibronectin type III repeat homology #status atypical <FN3>
F:222,315,347,423,449,478/Binding site: carbohydrate (Asn) (covalent) #status predicted

Query Match 6.5%; Score 120; DB 1; Length 761;
Best Local Similarity 22.2%; Pred. No. 0.065;
Matches 61; Conservative 40; Mismatches 114; Indels 60; Gaps 11;

QY 31 NNSIMLQTSK-----ENHALASSLCMDKQITONTYSKYLAEVNTSPVKAATNAV 81
Db 171 NNYIQTIGIKKTDEGTGRCGRILARGEI-----NKKDQIVTNPVPTIQARQNTV 221
QY 82 LCCPPIALRNLIITWIIIRGQPSCTKAYKETNETKETCTDERITWVSRPDQSDIQ 141
Db 222 NATANLQASVTLVDAE-----GPEPMTSWTKD-GEIIEBDEDEKIF---SDDSQILT 273
QY 142 IRPVAITHGYYRCIMTPTDGNFRKGYHLYQVLTPEVTLFQNR-----TAVKAVA 194
Db 274 IKKVDKNDKBAEVYCAIENKAGQDASIHAKYFAKPIYVENQJAMELEBOVTLTCEA-S 332

QY 195 GKPAQISWIPBGDCATKOEYWSNGTVKSTCHMEVHNSTVT-----CHV 241
Db 333 GDPISITWSTRTNISTSEKATLDGHMVVASHA-----RVSSLTLSKIYTDAGRYICTA 387
QY 242 SHLTG--NKSLEYIELLPVPAKKSAAKUYIPYIILT 274
Db 388 SNTIGDSQSWLYEVQYAP-----KLGQPVAVYT 416

RESULT 9

CD86 precursor - rabbit
C/Species: Oryctolagus cuniculus (domestic rabbit)
C/Date: 14-Feb-1997 #sequence_rev150 14-Feb-1997 #text_change 23-Jul-1999
C/Accession: I46691
R/Isono, T.; Seto, A.
Immunogenetics 42, 217-220, 1995
A/Title: Cloning and sequencing of the rabbit gene encoding T-cell costimulatory molecu
A/Reference number: I46691; PMID:95369849; PMID:7642234
A/Accession: I46691
A/Status: preliminary; translated from GB/EMBL/DBJ
A/Molecule type: mRNA
A/Residues: 1-330 <ISO>
A/Cross-references: GB:D49842; NID:G755098; PIDN:BA08642.1; PID:G755099
C/Superfamily: B7-2 antigen

Query Match 6.5%; Score 119.5; DB 2; Length 330;
Best Local Similarity 22.6%; Pred. No. 0.026;
Matches 77; Conservative 51; Mismatches 114; Indels 99; Gaps 18;

QY 14 LITFLVFA-EAEAPQNNISIMLQTSKENHALASSLCMDKQITONTYSKYLAEVNTSW 72
Db 9 LSVTFVFWALLISGA-----SLRIQAYFNKTA---DLPC---QFTNSQGRSISBLVFW 57
QY 73 PVKATNAVLCPPPIALRNLIITWIIIRGQPSCTKAYKETNETKETCTDERITWVS 132
Db 58 QDOER-----LVLYELFL-----GREKPDVDPYICRTS 87
QY 133 RPDQNSDQIRPVAITHGYRCIMVTPDGNFRG-----YHQLVLT---PEV 178
Db 88 PDQNSMQLQNVQIKKGYTCV-----HRGAGIVPIYQMSBELVLANFQPEI 141
QY 179 TLFQNRNRTA---VCKAVAKP-AAQISWIPBGDCATKOEYWSNGTVKSTCHMEVHN 233
Db 142 TLINRTNSAINLTCSVQGPPEPKMFFVLKTNAT-TEY--DGYEKSQDNVTGLYN 198
QY 234 VS-----TVCVSHLTKNKSLEYIELLV-----PGAKKSAAKUYIPYIILT 275
Db 199 ISIGSITPDDINNAITVCLQ--TESTETYSQHPFIVPADVPVPEKPRMLMAVALTL 256
QY 276 IILTVGFIWLK-----VNGCKRYKLNKTESTPYVE 307
Db 257 IVVGIVFLFTLMRKKEQCGVCECTIKKDKAENHVEE 297

RESULT 10

fasciadin II, transmembrane splice form precursor - fruit fly (Drosophila melanogaster)
C/Species: Drosophila melanogaster
C/Date: 21-Apr-1992 #sequence_rev150 21-Apr-1992 #text_change 17-Mar-2000
C/Accession: A41054
R/Grenningloh, G.; Rehm, E.J.; Goodman, C.S.
Cell 67, 45-57, 1991
A/Title: Genetic analysis of growth cone guidance in Drosophila: fasciadin II functions
A/Reference number: A41054; PMID:92005695; PMID:1913818
A/Accession: A41054
A/Status: preliminary
A/Molecule type: mRNA
A/Residues: 1-811 <GRB>
A/Cross-references: GB:M77165; NID:G157402; PID:G157403
C/Genetics:
A/Genes: flyBase:Fa2
A/Cross-references: flyBase:FBgn0000635

QY 195 GKPAQISWIPBGDCATKOEYWSNGTVKSTCHMEVHNSTVT-----CHV 241
Db 333 GDPISITWSTRTNISTSEKATLDGHMVVASHA-----RVSSLTLSKIYTDAGRYICTA 387
QY 242 SHLTG--NKSLEYIELLPVPAKKSAAKUYIPYIILT 274
Db 388 SNTIGDSQSWLYEVQYAP-----KLGQPVAVYT 416

C:Superfamily: neural cell adhesion molecule; fibronectin type III repeat homology; immunoglobulin-like fold
C:Keywords: membrane protein

Query Match	6.3%;	Score 117;	DB 2;	Length 811;
Best Local Similarity	22.5%;	Pred. No. 0.12;		
Matches 69;	Conservative 40;	Mismatches 126;	Indels 72;	Gaps 14.

```

QY 10 LGILLIITI-----FLVAEEGAQAOPNNSIMLTQTSKSNHAAASSIOWDEKOITQNS 62
D 46 VGRPLITCRPTVPEPSIVADQWOMONRNNTILPRKNGNQOPWYTEILPESS----- 98
QY 63 KTLAEVNTSMRPGMA-----TNAVLCCEPPLAKMLIITWEIIRGO-PECTAYR 112
D 99 --TALMTTSSVEMGGKRYCTASVANTELLEKGVIKTYVALITWNAENQYPTLGGDYV 156
QY 113 KETNETKEINCTBERITWVSRPD-----QNSDQIQRPAVITHDGYRRC--IMVT 159
D 157 VMCEVKADPNPT--IDMLRNGDPRIRTNDKYVQINGLLIRNVQESDEGIYTCRAVIE 213
QY 160 PDGNFHHGHLQVLYLVPEV-----TLFQNNKRNRAVCKAVAGRPAAQISMIPEBG---DC 209
D 214 TGELEETIVEVEFIQELIISLEPTNIEAVEGRPRANCTA-RGRVPEISWIRATQGLNV 272
QY 210 ATKOEYMSN--GTVTVKSTCHEWYVANSVTVCVSHLTG-----NKSLEYEL 254
D 273 ATADRFQVNPQTGLVITISSVQ---DDYGTYCTCLAKNAGVVDQKTKLNVLYVRPQIY-EL 348
QY 255 LPVPGAK 261
D 329 YNVTVGAR 335

```

RESULT 11

A: fsciclin II Pf-linked splice form precursor - fruit fly (*Drosophila melanogaster*)
C:Species: *Drosophila melanogaster*
C:Date: 21-Apr-1992 #sequence_revision 21-Apr-1992 #text_change 17-Mar-2000
C:Accession: B41054
R:Grenningloh, G.S. Rehm, E.U.; Goodman, C.S.
A>Title: Genetic analysis of growth cone guidance in *Drosophila*: fsciclin II functions
A:Reference number: A41054; MUID:92005695; PMID:191318
A:Accession: B41054
A:Status: Preliminary
A:Molecule type: mRNA
A:Residues: 1-873 <GR>
A:Cross-references: CB:M77166
C:Genetics:
A:Gene: FlyBase:Faaz
A:Cross-references: FlyBase:FBgn0000635
A:Superfamily: neural cell adhesion molecule, fibronectin type III repeat homology; immunoglobulin-like domain
A:Keywords: transmembrane protein

Query Match	6.3%;	Score 117;	DB 2;	Length 873;
Best Local Similarity	22.5%;	Pred. No. 0.14;		
Matches	69;	Conservative	40;	Mismatches 126;
			Indels	72;
			Gaps	14

```

QY      10 IGLLLIILI-----FLVAEEGAQPNNSIMLOTSKHNHALKSSSLQMDKEKQTNYNS 62
      46 VGPILLITCRPTPEPSPSLVADLQWKDNRRNTLLPFPNRNRPENYTELTPLGSS----- 98
QY      63 KYLAVENTSWPVRQA-----TNAYLCCPILARNLIIITWEIIIRGQ--PSCTKAYR 112
      99 --LALMITSLSYEWGKRYCTASANTLEKGVITIKRYVAITWNAPENGPYTLGGQYV 156
Db      113 KENETKETNCTDERITWSPRD-----QNSDLQIRPAVATHDGYRC--INVT 159
QY      157 VMCEYKAQPNPT---IDWLNRGDPRIRTNDKRYVQTNGLIRANQESDEGGYTCAAVIE 213
Db      160 PDGNHRHGDHLYVLTPEV-----TLFQNRNRFAVCAYAGKRAADISMIPEG---DC 209
QY      214 TGEILERTIRAEVFIQPELISLPTNLBAVEGKPPANCTA--RQKVPESIMIRDTQUNV 272
Db

```

QY	210	ATGQEWNSN---GTVVKSCTCHMEVHANSVTCVSHLTG-----	NSLSYIEL	254
		: :		
Db	273	ATADRRQVNPQIGLVTIISVSQ---DDVGITTCGLAKRNAGVVDQKTKLNLVVRPQIY-EL		348
QY	255	LPYPGAK	261	
		:		
Db	329	YNTVGAK	335	

RESULT 12
TICENT

neural cell adhesion molecule long domain form precursor - chicken
N.Alternate names: NCAM-180
N.Contains: neural cell adhesion molecule, short domain form (NCAM-140)
C.Species: Gallus gallus (chicken)
C.Date: 31-Mar-1993 #sequence revision 31-Mar-1993 #text change 22-Jun-1993
R.Cunningham, B.A.; Hemperly, J.J.; Murray, B.A.; Edelman, G.M.; Brackenbury, R.; Edelr
Science 236, 799-806, 1987
A.Title: Neural cell adhesion molecule: structure, immunoglobulin-like domains, cell su
A.Accession: A43613; MUID:87206190; PMID:3576199

A.Molecule type: mRNA
A.Residues: 1-175 <CD2>
A.Cross-references: GB:M15860
A.Accession: B43613
A.Molecule type: Protein
A.Residues: 20-44;120-127;202-221;320-342;399-415;640-659;822-828 <GUN>
A.Note: Asn-222 probably binds carbohydrate; Asn-226 probably does not
R.Hemperly, J.J.; Murray, B.A.; Edelman, G.M.; Cunningham, B.A.
Proc.Natl. Acad. Sci. U.S.A. 83, 3037-3041, 1986
A>Title: Sequence of a cDNA clone encoding the polystylic acid-rich and cytoplasmic dome
A.Reference number: A25435; MUID:86206089; PMID:3458261
A.Accession: A25435
A.Molecule type: mRNA
A.Residues: 128-1091 <HEM>
A.Cross-references: GB:M13210
A.Accession: B25435

A.Molecule type: Protein
A.Residues: 128-1070;222-240;428-439;611-631;744-760;763-781;1080-1084 <HE2>
R.Murray, B.A.; Owens, G.C.; Prediger, E.A.; Crossen, K.L.; Cunningham, B.A.; Edelman,
J. Cell Biol. 103, 1431-1439, 1986
A>Title: Cell surface modulation of the neural cell adhesion molecule resulting from alth
A.Reference number: A46550; MUID:87033934; PMID:3771645
A.Accession: A46550

A.Molecule type: DNA
A.Residues: 810-1070 <MDR>
A.Cross-references: GB:X04479
R.Saenger, M.; Covault, J.
submitted to the EMBL Data Library, February 1993
A.Reference number: S36950
A.Accession: S36950

A.Molecule type: DNA
A.Residues: 1-17 <SAS>
A.Cross-references: EMBL:X70342; NID:g417631; PIDN:CAH49807.1; PTD:g417632
R.Covault, G.; Li, B.; Foreest, D.; Brackenbury, R.
Genomics 14, 875-882, 1992
A>Title: Conserved regulatory elements in the promoter region of the N-CAM gene.
A.Reference number: A44369; MUID:93122797; PMID:1478668
A.Accession: A44369

A.Molecule type: DNA
A.Residues: 1-17 <CCP>
A.Cross-references: EMBL:Z12128; NID:g63653; PIDN:CAA78113.1; PTD:g63654
A.Experimental source: White Leghorn
R.Coile, G.U.; Loewy, A.; Cross, N.V.; Akesson, R.; Glaeser, L.
J. Cell Biol. 103, 1739-1744, 1986
A>Title: Topographic localization of the heparin-binding domain of the neural cell adhes
A.Reference number: A60852; MUID:87057627; PMID:2430978
A.Accession: A60852

A.Molecule type: protein
A.Residues: 20-29 <COB>
K.Rao, Y.; Wu, X.F.; Garlepy, T.; Rutishauser, U.; Stu, C.H.
J. Cell Biol. 118, 937-949, 1992

A:Title: Identification of a peptide sequence involved in homophilic binding in the neu
A:Reference number: A43280, MUID:92353934, PMID:1380002
A:Residues: 1-66, 'A', 68-392 <MEN>
A:Cross-references: GB:M24406
C:Comment: The normal function of this receptor is unknown. Membrane-bound and soluble
C:Genetics:
A:Gene: GDB:PVR; FVS
A:Map position: 19q13.2-19q13.2
A:Introns: 27/1; 143/1; 242/1; 281/2; 331/1
C:Superfamily: poliovirus receptor; immunoglobulin homology
C:Keywords: alternative splicing; duplication; glycoprotein; receptor; transmembrane pr
F:1-20/Domain: signal sequence #status predicted <SIG>
F:21-392/Product: poliovirus receptor delta #status predicted <MAT>
F:21-392/Delta: extracellular #status predicted <EXT>
F:21-392/Delta: extracellular #status predicted <IMM1>
F:159-223/Delta: immunoglobulin homology <IMM2>
F:159-223/Delta: immunoglobulin homology <IMM3>
F:344-352/Delta: transmembrane #status predicted <TMN>
F:344-352/Delta: transmembrane #status predicted <INT>
F:346-352/Delta: intracellular #status predicted <INT>
F:49-123,166-221,266-312/Delta: bonds: #status predicted
F:105,120,188,218,237,278,307,313/Binding site: carbohydrate (Asn) (covalent) #status p
Query Match 6.3%; Score 117; DB 1; Length 1091;
Best Local Similarity 22.6%; Pred. No. 0.18;
Matches 64; Conservative 33; Mismatches 104; Indels 76; Gaps 12;
QY 31 NNSIMLOTSTK-----ENHALASSSLCMEKQITON-----YKVLAEVNTSP 73
DB 171 NNVIQIRGIKRTDEGTGRCGRILARGEINFDICQIVVPPSVARASOTMATAALSSGS 230
QY 74 VKKATNAVLCCEPIALRNLIITWEIILRGQPSCTKAYRENETETETCTERITWVR 133
DB 231 VTLACDADGPPPE-----TMTW--TKQGEF-----IEQDNEEKYSNYD----- 268
QY 134 PDNSDLQIRPVAITHDGYRCIMVTPDGNFHRGYHQLVLTPEVTLFQNRN----- 186
DB 269 ---GSELIIRKVDKSDAEYICIAENKAGEQDATHIKVFAKPKRITYENKAMELEDOI 325
QY 187 TAVCKAAKGAQPAQISIPFGDCATKQEWKNGTWTAKSCHEVANNSTVT----- 238
DB 326 TLTCDA-SGDFISITWKTSTNINSEKTLDRIVRSHA-----RVSSLTLKEIQYTD 379
QY 239 -----CHVSHLTG--NKSLEYIELLPVGAKSKAKLYIPYIILT 274
DB 380 AGEVCTASNTIGDSDQAWYLEVQVAP-----KLQGPVAVYT 416
RESULT 13
RWHUPD
poliovirus receptor splice form delta precursor - human
N:Alternate names: poliovirus receptor H20B
C:Species: Homo sapiens (man)
C:Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 02-Sep-1997
C:Accession: A43024, B31496
R:Koike, S.; Horie, H.; Ise, I.; Okitsu, A.; Yoshida, M.; Itzuka, N.; Takeuchi, K.; Tak
EMBO J. 9, 3217-3224, 1990
A:Title: The poliovirus receptor protein is produced both as membrane-bound and secreted
A:Reference number: S12048; MUID:91006015; PMID:2170108
A:Accession: A43024
A:Molecule type: DNA
A:Residues: 1-392 <KOI>
A:Cross-references: EMBL:X64116
A>Note: 67-Ala was also found
R:Mendelsohn, C.L.; Wimmer, E.; Racanelli, V.R.
Cell 56, 855-865, 1989
A:Title: Cellular receptor for poliovirus: molecular cloning, nucleotide sequence, and e
A:Reference number: A90910; MUID:89168426; PMID:2538245
A:Accession: B31496

A:Molecule type: mRNA
A:Residues: 1-66, 'A', 68-392 <MEN>
A:Cross-references: GB:M24406
C:Comment: The normal function of this receptor is unknown. Membrane-bound and soluble
C:Genetics:
A:Gene: GDB:PVR; FVS
A:Map position: 19q13.2-19q13.2
A:Introns: 27/1; 143/1; 242/1; 281/2; 331/1
C:Superfamily: poliovirus receptor; immunoglobulin homology
C:Keywords: alternative splicing; duplication; glycoprotein; receptor; transmembrane pr
F:1-20/Delta: signal sequence #status predicted <SIG>
F:21-392/Product: poliovirus receptor delta #status predicted <MAT>
F:21-392/Delta: extracellular #status predicted <EXT>
F:21-392/Delta: extracellular #status predicted <IMM1>
F:159-223/Delta: immunoglobulin homology <IMM2>
F:159-223/Delta: immunoglobulin homology <IMM3>
F:344-352/Delta: transmembrane #status predicted <TMN>
F:344-352/Delta: transmembrane #status predicted <INT>
F:346-352/Delta: intracellular #status predicted <INT>
F:49-123,166-221,266-312/Delta: bonds: #status predicted
F:105,120,188,218,237,278,307,313/Binding site: carbohydrate (Asn) (covalent) #status p
Query Match 6.3%; Score 115.5; DB 1; Length 392;
Best Local Similarity 24.4%; Pred. No. 0.069;
Matches 59; Conservative 32; Mismatches 82; Indels 69; Gaps 11;
QY 71 SWPVKATNAVLCCEPIALRNLIITWEIILRGQPSCTKAYRENETETETCTERITWVR 98
DB 8 AMPLIALLVLLSMPPGTGDVVQAPQVPGFGLGSDVTLPCYLQVNMMEVTHVSLTW- 66
QY 99 IILRGQPSCTKAYRKER-----NETKETCTDERITWVRPDNSDLQIRPVAITHDGY 153
DB 67 --THGSGMAVYHQIQGYSYSKRLBEVYARLGEELR---NASLRMGRLRPDEGNY 121
QY 154 RCIMVT-PDGNFHRGYHQLVLTPE-----VTLFQNRNRTAVCKAAKGAQISWIP 205
DB 122 TCLFVTFPGQSRSDVILWRLAKPQNTAEVQKQLTGEPVPMARCVSTGCRPFAQITWHS 181
QY 206 E-GDCATKQ-EYWSNGTWTAKSCHEVANNSTVT-----TTCVYSH-----LTGNS 249
DB 182 DLGMPNTSQVPGSLGTVTSL--WILVSSQVQCKVYCKVHESFEKPOLITVNT 239
QY 250 LY 251
DB 240 VY 241
RESULT 14
RWHUPA
poliovirus receptor splice form alpha precursor - human
N:Alternate names: poliovirus receptor H20A
C:Species: Homo sapiens (man)
C:Date: 30-Jun-1993 #sequence_revision 30-Jun-1993 #text_change 22-Jun-1999
C:Accession: S12048, A31496
R:Koike, S.; Horie, H.; Ise, I.; Okitsu, A.; Yoshida, M.; Itzuka, N.; Takeuchi, K.; Tak
EMBO J. 9, 3217-3224, 1990
A:Title: The poliovirus receptor protein is produced both as membrane-bound and secreted
A:Reference number: S12048; MUID:91006015; PMID:2170108
A:Accession: S12048
A:Molecule type: DNA
A:Residues: 1-417 <KOI>
A:Cross-references: EMBL:X64116; NID:935809; PIDN:CA45478.1; PID:9825708
A>Note: 67-Ala was also found
A>Note: the gamma form has 331-Gly and lacks residues 332-384
R:Mendelsohn, C.L.; Wimmer, E.; Racanelli, V.R.
Cell 56, 855-865, 1989
A:Title: Cellular receptor for poliovirus: molecular cloning, nucleotide sequence, and
A:Reference number: A90910; MUID:89168426; PMID:2538245
A:Accession: A31496
A:Molecule type: mRNA
A:Residues: 1-66, 'A', 68-417 <MEN>
A:Cross-references: GB:M29535

C/Comment: The normal function of this receptor is unknown. Membrane-bound and soluble f

C/Genetics:

A/Gene: GDB:PVR, PVS

A/Cross-references: GDB:120324; OMIM:173850

A/Map position: 19q13.2-19q13.2

A/Introns: 27/1, 143/1, 242/1, 281/2, 331/1, 384/1, 394/3

A/Suprafamily: poliovirus receptor; immunoglobulin homology

C/Keywords: alternative splicing; duplication; glycoprotein; receptor; transmembrane pr

F:1-20/Domain: signal sequence #status predicted <SIG>

F:21-417/Product: poliovirus receptor alpha #status predicted <PVRA>

F:21-343/Domain: extracellular #status predicted <EXT>

F:21-339,385-417/Product: poliovirus receptor beta #status predicted <PVRA>

F:42-125/Domain: immunoglobulin homology <IMM1>

F:159-223/Domain: immunoglobulin homology <IMM2>

F:344-367/Domain: immunoglobulin homology <IMM3>

F:368-417/Domain: intracellular #status predicted <INT>

F:49-123,166-221,286-312/Disulfide bonds: #status predicted

F:105,120,188,218,237,278,307,313/Binding site: carbohydrate (Asn) (covalent) #status pr

Query Match

Best Local Similarity 24.4%; Pred. No. 0.074; Length 417;

Matches 59; Conservative 32; Mismatches 82; Indels 69; Gaps 11;

QY 71 SMPVMAATVAVCCPPIALRNIT-----ITWE 98

DB 8 AMPLLVALLVLSWPPPTGTVQAPVQVGLDSTVLPCLVQVPMVEVTHVSQLTW- 66

QY 99 ILRGQSCCTKAYKRET-----NETKENTCDETRITWSPDQSDQIRVATITHGXY 153

DB 67 --TRHGEGSMVAVFHTQGPSYSSEKRLFFVAARIGALR--NASLMPGLRVDESGNY 121

QY 154 RCIMVT-PDGNFHRYHLQVLTPE-----VTLFQNRNTAVCKAVAGRAAQISNIP 205

DB 122 TCLFTFTFGQSRVIMWRLAKPQNTAEVQKVLGTGSPVMAVCSTGGRPPAQITWHS 181

QY 206 E--GDCATKQ--EYNSGTVATKSTCHWEVHVS-----TVYCHVSH-----LTGKNS 249

DB 182 DLGKPTNTSQVPGFLSGIVTVTSL--WILVPSQVDGKNVCKVHESFEKPKQLLTVALT 239

QY 250 LY 251

DB 240 VY 241

RESULT 15

A/1060

neural cell adhesion molecule L1 precursor - human

N/Alternate names: L1CAM

C/Species: Homo sapiens (man)

C/Date: 10-Sep-1999 #sequence revision 10-Sep-1999 #text change 21-Jul-2000

C/Accession: A41060; S18454; A35331; S21971; S21972; A60223; A31072; G02508

R/Hlaivn, M.L.; Lemmon, V.

Genomics 11, 416-423, 1991

A/Title: Molecular structure and functional testing of human L1CAM: an interspecies comp

A/Reference number: A41060; MUID:92120663; PMID:1769655

A/Accession: A41060

A/Molecule type: mRNA

A/Residues: 1-1257 <H1A>

A/Cross-references: GB:M64296; NID:G186053; PIDN:AACT14352.1; PID:G3068548

R/Kobayashi, M.; Mura, M.; Asou, H.; Umemura, K.

Biotechm. Acta 1090, 236-240, 1991

A/Title: Molecular cloning of cell adhesion molecule L1 from human nervous tissue: a com

A/Reference number: S18454; MUID:92031698; PMID:1932117

A/Accession: S18454

A/Molecule type: mRNA

A/Residues: 1-3, 'V', 5-215, 'T', 217-249, 'T', 251-275, 'SV', 278-356, 'E', 358-625, 'V', 627-1257

A/Cross-references: EMBL:X59647; NID:G55009; PIDN:CAA42508.1; PID:G55010

A/Notes: the authors translated the codon GAA for residue 27 as Gly

R/Djabali, M.; Matei, M.G.; Nguyen, C.; Roux, D.; Demengot, J.; Denicot, F.; Moos, M.;

Genomics 7, 587-593, 1990

A/Title: The gene encoding L1, a neural adhesion molecule of the immunoglobulin family,

A/Reference number: A35331; MUID:90353557; PMID:2387585

A/Accession: A35331

A/Molecule type: DNA

A/Residues: 332-371 <DUA>

A/Cross-references: GB:M55271

R/Rosenthal, A.; Mackinnon, R.N.; Jones, D.S.C.

Nucleic Acids Res. 19, 5395-5401, 1991

A/Title: PCR walking from microdissection clones M54 identifies three exons from the hum

A/Reference number: S21971; MUID:92020233; PMID:1923824

A/Accession: S21971

A/Molecule type: DNA

A/Residues: 1082-1176 <ROS>

A/Cross-references: EMBL:X58775; NID:G29642; PIDN:CAA41576.1; PID:G29643

A/Accession: S21972

A/Status: nucleic acid sequence not shown; translation not shown

A/Molecule type: mRNA

A/Residues: 353-935, 'V', 937-1176 <RO2>

A/Cross-references: EMBL:X58776; NID:G29644; PIDN:CAA37831.1; PID:G4467833

R/Harper, J.R.; Prince, J.T.; Healy, P.A.; Stuart, J.K.; Nauman, S.J.; Stallcup, W.B.

J. Neurochem. 56, 797-804, 1991

A/Title: Isolation and sequence of partial cDNA clones of human L1: homology of human a

A/Reference number: A60223; MUID:91132183; PMID:1938995

A/Accession: A60223

A/Status: not compared with conceptual translation

A/Molecule type: mRNA

A/Residues: 1030-1115, 'WLC', 1118-1176, 1181-1257 <HAR>

R/Moyle, J.M.; Frank, R.; Mujo, K.; Spiro, R.C.; Reisfeld, R.A.; Rathjen, F.G.

J. Biol. Chem. 263, 11943-11947, 1988

A/Title: A human brain glycoprotein related to the mouse cell adhesion molecule L1.

A/Reference number: A31072; MUID:88298876; PMID:3136168

A/Accession: A31072

A/Molecule type: protein

A/Residues: 'Q', 21-36 <WOL>

R/Platzter, M.; Bauer, D.; Drescher, B.

submitted to the EMBL Data Library, March 1995

A/Reference number: H01368

A/Accession: G02506

A/Status: preliminary; translated from GB/EMBL/DBJ

A/Molecule type: DNA

A/Residues: 1-1257 <PLA>

A/Cross-references: EMBL:U52112; NID:G1302657; PIDN:AACT1746.1; PID:G1302658

C/Genetics:

A/Gene: GDB:L1CAM

A/Cross-references: GDB:120133; OMIM:303350; OMIM:308840

A/Map position: Xq28-Xq28

A/Introns: 26/1, 31/1, 66/2, 134/1, 175/1, 232/1, 265/2, 331/1, 375/1, 423/1, 460/2, 514

2

C/Suprafamily: neural cell adhesion molecule L1; fibronectin type III repeat homology;

C/Keywords: alternative splicing; cell adhesion; duplication; glycoprotein; transmembr

F:1-19/Domain: signal sequence #status predicted <SIG>

F:20-1257/Product: neural cell adhesion molecule L1 #status predicted <M1A>

F:257-314/Domain: immunoglobulin homology <IMM1>

F:352-593/Domain: immunoglobulin homology <IMM2>

Query Match

Best Local Similarity 20.1%; Pred. No. 0.31; Length 1257;

Matches 64; Conservative 47; Mismatches 135; Indels 72; Gaps 11;

QY 77 ATNAVCCCP-----IALNLIITWEIIRGQPCCTAKKMETKETNT 124

DB 231 ATNSMIDKRPRLIFPNSSSHVLAQGPVLV-ECLABFPPTIKMLRPSGMPA--- 285

QY 125 DEBITVSRPDQSDQIRPVAITHDGYRCIMVTPDGNFHRYHLQV-----LVTPEV 178

DB 286 -DRVTV--QNNHKTLQLKVGEDDEGEYRCIAENSLGARRAVYTVTAAPYMLHKPQS 341

QY 179 TLFQNRNTAVCKAVAGRAAQISW-----IPGDCATKREYNSNGVTVKSTCHWEVHV 234

DB 342 HLYGPEETARLDCQVGRQPEVTRWINGIPVEELAKDQKXRIQRCALLTSVQPSDTWV 401

QY 235 STYTCVSH--LTGKSLYTELTPVGAKKSAKLYI-----PYILITITITVIGFIWL 286

DB 402 TQCEANNRGLLANAYITVQLPKILRADNQTVMAVGSTAYLLCKAFGAPVPSVQVL 461

Fri May 7 11:49:15 2004

us-10-009-445a-20.rpr

Page 8

QY	287	LKNGCRKYLKNTSTPVEDEMOPIASYT-----	EKNPLTD	326
Db	462	-----DGDGTTVLQDERFFPYANGTIGIRDLOANDIGRYFCIAANDQNNVTIM		509
QY	327	TTNKVK-ASQALQSEVDT		343
Db	510	ANLKVKDATOITOGPRST		527

Search completed: May 7, 2004, 11:42:44
Job time : 22 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 7, 2004, 11:35:54 ; Search time 17 Seconds

(without alignments)
1065.907 Million cell updates/sec

Title: US-10-009-445a-20

Perfect score: 1846
Sequence: 1 MLCFWRANIGLLILITFL.....NKVRSQALQSEVDTDLHTL 348

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 141681 seqs, 52070155 residues

Total number of hits satisfying chosen parameters: 141681

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_42:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1706.5	92.4	325	1 MOXR_HUMAN	Q86446 homo sapien
2	911	49.3	327	1 MOXR_RAT	Q96858 mus musculu
3	899.5	48.7	326	1 MOXR_MOUSE	Q96857 mus musculu
4	125.5	6.8	530	1 PVR2_MOUSE	Q92697 mus musculu
5	125.5	6.8	538	1 PVR2_HUMAN	Q92697 mus musculu
6	122.5	6.6	524	1 BUTY_MOUSE	Q62556 mus musculu
7	122.5	6.6	853	1 NCAL_BOVIN	P13592 bos taurus
8	120	6.5	761	1 NCAL2_HUMAN	P13592 homo sapien
9	120	6.5	848	1 NCAL_HUMAN	P13591 homo sapien
10	119.5	6.5	330	1 CD86_RABIT	P43071 homo sapien
11	117	6.3	873	1 PAS2_DROME	P34082 drosophila
12	117	6.3	1091	1 NCAL_CHICK	P13590 gallus gall
13	115.5	6.3	417	1 PVR_HUMAN	P15151 homo sapien
14	115	6.2	1257	1 CAML_HUMAN	P32004 homo sapien
15	114.5	6.2	858	1 NCAL_RAT	P13596 mus musculu
16	112	6.1	515	1 PVR1_MOUSE	Q93716 mus musculu
17	110.5	6.0	725	1 NCAL2_MOUSE	P13594 mus musculu
18	110.5	6.0	1115	1 NCAL_MOUSE	P13595 mus musculu
19	108.5	5.9	517	1 PVR1_HUMAN	Q15222 homo sapien
20	108.5	5.9	564	1 C166_BRARE	Q94460 brachydanio
21	108	5.9	496	1 ACH3_CHICK	P03481 gallus gall
22	105.5	5.7	417	1 PVR1_HUMAN	P15151 homo sapien
23	105.5	5.7	515	1 PVR1_MOUSE	Q93716 mus musculu
24	105.5	5.7	1070	1 PVR1_MOUSE	Q93716 mus musculu
25	105	5.7	837	1 NCAL2_HUMAN	P13594 mus musculu
26	103.5	5.6	271	1 NCAL_MOUSE	P13595 mus musculu
27	103.5	5.6	837	1 NCAL_MOUSE	P13595 mus musculu
28	103.5	5.6	332	1 NCAL_MOUSE	P13595 mus musculu
29	102.5	5.6	278	1 NCAL_MOUSE	P13595 mus musculu
30	101.5	5.5	526	1 NCAL_MOUSE	P13595 mus musculu
31	101.5	5.5	526	1 NCAL_MOUSE	P13595 mus musculu
32	101.5	5.5	1461	1 NCAL_MOUSE	P13595 mus musculu
33	101	5.5	332	1 NCAL_MOUSE	P13595 mus musculu

34	101	5.5	1051	1 PVR1_CHICK	Q91048 gallus gall
35	100.5	5.4	332	1 NCAL2_GORGO	Q91048 gallus gall
36	100	5.4	821	1 NCAL2_HUMAN	Q91048 gallus gall
37	99	5.4	862	1 NCAL2_MOUSE	Q91048 gallus gall
38	98.5	5.3	345	1 NCAL2_BOVIN	Q91048 gallus gall
39	98	5.3	278	1 NCAL2_MOUSE	Q91048 gallus gall
40	98	5.3	1259	1 NCAL2_MOUSE	Q91048 gallus gall
41	97.5	5.3	345	1 NCAL2_HUMAN	Q91048 gallus gall
42	97.5	5.3	682	1 NCAL2_HUMAN	Q91048 gallus gall
43	97.5	5.3	1260	1 NCAL2_HUMAN	Q91048 gallus gall
44	97.5	5.3	1447	1 NCAL2_HUMAN	Q91048 gallus gall
45	97	5.3	348	1 NCAL2_HUMAN	Q91048 gallus gall

ALIGNMENTS

RESULT 1
ID MOXR_HUMAN STANDARD: PRT; 325 AA.
AC Q8TD46; Q8TD44; Q8TD45; Q8TD52;
DT 28-FEB-2003 (Rel. 41, Created)
DT 28-FEB-2003 (Rel. 41, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Cell surface glycoprotein OX2 receptor precursor (CD200 cell surface glycoprotein receptor).
GN MOXR OR OX2R OR CD200R OR CRT2.
OS Homo sapiens (Human).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
NCBI_Taxid=9606;
[1]
SEQUENCE FROM N.A. (ISOFORM 1).
RA Wright G.J., Brown M.H., Barclay N.;
RT "K14, the HIV-8 viral OX2 homolog interacts with the human OX2 receptor with identical affinity and kinetics as the host OX2 protein."
RT Submitted (JUN-2000) to the EMBL/Genbank/DBJ databases.
RN [2]
SEQUENCE FROM N.A. (ISOFORMS 1; 2; 3 AND 4).
RA Suarez A., Viettes J.M., De la Torre R., Ortega M.A., Gil A., Sanchez-Pozo A.;
RT "Characterization of human CD200R gene."
RT Submitted (APR-2002) to the EMBL/Genbank/DBJ databases.
CC - FUNCTION: Receptor for the OX2 cell surface glycoprotein. Also binds to HIV-8 K14 viral OX2 homolog with identical affinity and kinetics as the host OX2.
CC - SUBCELLULAR LOCATION: Type I membrane protein (isoforms 1 and 4); secreted (isoform 2 and 3).
CC - ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=4;
CC Name=1;
CC IsoId=Q8TD46-1; Sequence=Displayed;
CC Name=2;
CC IsoId=Q8TD46-2; Sequence=VSP_002614, VSP_002615, VSP_002616;
CC Name=3;
CC IsoId=Q8TD46-3; Sequence=VSP_002615, VSP_002616;
CC Name=4;
CC IsoId=Q8TD46-4; Sequence=VSP_002614;
CC - SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.
CC - SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC This SWISS-PROT entry is copyrighted. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation in the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@sib-sib.ch).
CC
CC EMBL: AF283760; AAN61171.1; -
CC EMBL: AF497548; AAM16157.1; -
CC EMBL: AF497549; AAM16158.1; -

DR	EMBL; AF497550; AAM16159.1; -;
DR	EMBL; AF495380; AAM146622.1; -;
DR	MIM; 607546; -;
DR	InterPro; IPR007110; IG-like.
DR	PROSITE; PSS0835; IG_LIKE; 1.
KW	Transmembrane; Receptor; Glycoprotein; Signal; Polymorphism; Alternative splicing.
FT	SIGNAL
FT	CHAIN
FT	DOMAIN
FT	TRANSMEM
FT	DOMAIN
FT	DOMAIN
FT	DOMAIN
FT	DISULFID
FT	CARBOHYD
FT	CARBOHYD
FT	CARBOHYD
FT	CARBOHYD
FT	CARBOHYD
FT	CARBOHYD
FT	CARBOHYD
FT	VARSPLIC
FT	VARSPLIC
FT	VARSPLIC
FT	VARIANT
FT	VARIANT
FT	VARIANT
FT	SEQUENCE

325 AA; 36620 MW; DDDSFATLFEZJ37BBD CRC64;

POTENTIAL.
CELL SURFACE GLYCOPROTEIN OX2 RECEPTOR.
EXTRACELLULAR (POTENTIAL).
POTENTIAL.
CYTOLASMIC (POTENTIAL).
IG-LIKE V-TYPE.
IG-LIKE C2-TYPE.
POTENTIAL.
N-LINKED (GLCNAC . . .) (POTENTIAL).
N-LINKED (GLCNAC . . .) (POTENTIAL).
N-LINKED (GLCNAC . . .) (POTENTIAL).
N-LINKED (GLCNAC . . .) (POTENTIAL).
N-LINKED (GLCNAC . . .) (POTENTIAL).
N-LINKED (GLCNAC . . .) (POTENTIAL).
N-LINKED (GLCNAC . . .) (POTENTIAL).
A -> AEAEAGAPQPNISLMQTSKRNAL (in isoform
2 and isoform 4).
/FTid=VSP 002614.
VLPPEVLTPQNRRRA -> GKEHHILRYFSPL (in
isoform 2 and isoform 3).
/FTid=VSP 002615.
Missing (in isoform 2 and isoform 3).
/FTid=VSP 002616.
R -> K (in allele 2).
/FTid=VAR 014352.
P -> T (in allele 2).
/FTid=VAR 014353.
O -> H (in allele 2).
/FTid=VAR 014354.

Query	Match	Similarity	Score	DB	Length	Mismatches	Indels	Gaps
Best Local Similarity	93.1%	Pred	No. 6,3e-140					
Matches	324	Conservative	1	Mismatches	0	Indels	23	Gaps
QY	1	MLCPWRTANIGLLIIITFIPLVAEAGAAQPNNSLMLQTSKENHALLASSSLCMDEKOITON	60					
Db	1	MLCPWRTANIGLLIIITFIPLVA-----ASSSLCMDEKOITON	37					
QY	61	YSKYLVLEAVNTSWPVKKATNAVLCCEPIALRNLIITITWELIRGPGSTCKYRKETNETE	120					
Db	38	YSKYLVLEAVNTSWPVKKATNAVLCCEPIALRNLIITITWELIRGPGSTCKYRKETNETE	97					
QY	121	TNCTDERITWSSHPDQNSDLQIRPVAITHDGYRCIMVTPDGNFHRGYHLQVILVTEVTL	180					
Db	98	TNCTDERITWSSHPDQNSDLQIRPVAITHDGYRCIMVTPDGNFHRGYHLQVILVTEVTL	157					
QY	181	FOKRNRTAVCAKAVGAPAOISWIEBGCATKQEWXSGTIVYSTCHMEVHNVSIVTCH	240					
Db	158	FOKRNRTAVCAKAVGAPAOISWIEBGCATKQEWXSGTIVYSTCHMEVHNVSIVTCH	217					
QY	241	VSHLTGNKSLYEILFLVPFGAKKSAAKLYIPYIIITLIITITVIGFIMLKVNGCKRYKLNKT	300					
Db	218	VSHLTGNKSLYEILFLVPFGAKKSAAKLYIPYIIITLIITVIGFIMLKVNGCKRYKLNKT	277					
QY	301	ESPTPVVEDEMOPYASTYTERKNPLVDITNKVYASGALOSEVDTPLHL	348					
Db	278	ESPTPVVEDEMOPYASTYTERKNPLVDITNKVYASGALOSEVDTPLHL	325					

DT	28-FEB-2003	(Rel. 41, Created)	
DT	28-FEB-2003	(Rel. 41, Last sequence update)	
DT	10-OCT-2003	(Rel. 42, Last annotation update)	
DE	Cell surface glycoprotein OX2 receptor precursor (CD200 cell surface glycoprotein receptor) (OX102 antigen).		
GN	MOX2R OR OX2R.		
OS	Rattus norvegicus (Rat).		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.		
OX	NCBI_TaxId=10116;		
RP	SEQUENCE FROM N.A., SEQUENCE OF 24-42, CHARACTERIZATION, AND TISSUE SPECIFICITY.		
RC	STRAIN=PVG;		
RX	MEDLINE=20434845; PubMed=10981966;		
RA	Wright G.J., Pulavenc M.T., Willis A.C., Hoek R.M., Sedgwick J.D., Brown M.H., Barclay A.N.;		
RT	"lymphoid/neuronal cell surface OX2 glycoprotein recognizes a novel receptor on macrophages implicated in the control of their function.";		
RL	Immunity 13:233-242 (2000).		
CC	-1- FUNCTION: Receptor for the OX2 cell surface glycoprotein.		
CC	-1- SUBCELLULAR LOCATION: Type I membrane protein.		
CC	-1- TISSUE SPECIFICITY: Restricted to cells of the myeloid lineage.		
CC	-1- PFM: Phosphorylated on tyrosine residues.		
CC	-1- PMM: Highly N-glycosylated.		
CC	-1- SIMILARITY: Contains 1 immunoglobulin-like C2-type domain.		
CC	-1- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.		
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.ebi.ac.uk/announcement/ or send an email to license@ebi.ac.uk).		
CC	or send an email to license@ebi.ac.uk .		
DR	EMBL: AF231392; AAF98555.1; -		
DR	InterPro: IPR007110, Ig-like.		
DR	InterPro: IPR003599, Ig.		
DR	SMART: SM00409, Ig, 1.		
DR	PROSITE: PS50835; IG_LIKE, 2.		
KW	Transmembrane; Receptor; Glycoprotein; Signal; Phosphorylation; Antigen.		
FT	SIGNAL	1..23	CELL SURFACE GLYCOPROTEIN OX2 RECEPTOR.
FT	CHAIN	24..327	EXTRACELLULAR (POTENTIAL).
FT	DOMAIN	24..239	POTENTIAL.
FT	TRANSMEM	240..260	CYTOPLASMIC (POTENTIAL).
FT	DOMAIN	261..327	IG-LIKE V-TYPE.
FT	DOMAIN	26..145	IG-LIKE C2-TYPE.
FT	DOMAIN	147..226	POTENTIAL.
FT	DISULFID	58..129	POTENTIAL.
FT	DISULFID	164..213	POTENTIAL.
FT	CARBOHYD	29..29	N-LINKED (GLCNAC. . .).
FT	CARBOHYD	34..34	N-LINKED (GLCNAC. . .).
FT	CARBOHYD	43..43	N-LINKED (GLCNAC. . .).
FT	CARBOHYD	96..96	N-LINKED (GLCNAC. . .).
FT	CARBOHYD	159..159	N-LINKED (GLCNAC. . .).
FT	CARBOHYD	187..187	N-LINKED (GLCNAC. . .).
FT	CARBOHYD	192..192	N-LINKED (GLCNAC. . .).
FT	CARBOHYD	222..222	N-LINKED (GLCNAC. . .).
FT	SEQUENCE	327 AA; 35533 MW; BA0657FEC77B610C CRC64;	

	Query Match	Similarity	49.3%;	Score 911;	DB 1;	Length 327;
	Best Local	Similarity	53.7%;	Pred. No. 2.3e-71;		
	Matches 189;	Conservative %	40;	Mismatches 92;	Indels 30;	Gaps 4;
Oy	1	MLCPWRPANTGELLITITITPVAEAEAGAAPNSIMLTQSKENHNAIASSLSICMDEKQITON				60
		1	MLCPWRPNTVAALLIIVGVF-----	-AAESSCPDDNQOTMON		34
Db						
Oy	61	YSKYLAAVTNWSMPKMAATNNVLCCEPITALNLIITITWELLIRGQSCCKAYRKETNTEKE				120
		35	NSSTNTEVNTTIVPQMGKGLLCCPESISLTVLIIITITITILRGPSLIIISVKDRTREHE			94
Db						

CC modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announcement> or send an email to license@isb-sib.ch).

CC -----

CC EMBL: AF231393; AAF98556.1; -

CC EMBL: BC052682; AAH52682.1; -

CC MGI: 1889024; Mox2r.

CC InterPro: IPR007110; Ig-Like.

CC InterPro: IPR003599; Ig.

CC SMART: SM00409; Ig, 1.

CC PROSITE: PS50835; Ig Like; 1.

CC Transmembrane, Receptor; Glycoprotein; Signal.

CC SIGNAL

CC CHAIN 1 25

CC DOMAIN 26 238

CC TRANSMEM 239 259

CC DOMAIN 260 326

CC DOMAIN 51 136

CC DOMAIN 138 229

CC DISULFID 158 129

CC CARBOHYD 164 213

CC CARBOHYD 29 29

CC CARBOHYD 34 34

CC CARBOHYD 35 35

CC CARBOHYD 44 44

CC CARBOHYD 93 93

CC CARBOHYD 101 101

CC CARBOHYD 159 159

CC CARBOHYD 192 192

CC CARBOHYD 207 207

CC CARBOHYD 221 221

CC CARBOHYD 233 233

CC SEQUENCE 326 AA; 35504 MM; 02583959602F82A3 CRC64;

Query Match 48.7%; Score 899.5; DB 1; Length 326;

Best Local Similarity 53.4%; Pred. No. 2, 9e-70;

Matches 187; Conservative 43; Mismatches 89; Indels 31; Gaps 5;

CC 1 MLCPPWRTANGLGLITLITFLVAREAGAAQPNNSIMLQTSKENHALASSLCMDCKQITQ- 59

CC 1 MFCPPRTSALAVLLINGVF-----AGSSCTDKNQTTON 34

CC 60 NYSKVLAEVNTSPVKNATNAVLCPPIALRNLIITWEIILGQSSCTKAYKENEYK 119

CC 35 NSSSPPLQVNTTVSVQIGTKALCCFSIPFKAVLLITWIKRGLPSCTIAYKVDI-KTN 93

CC 120 ETNCTDERITWVSRPQNSDLOIRPVALTHDGYRCIMVTPDGNFRRGYHLQVLTPEVT 179

CC 94 ETSCLGRNITWASTPDHSPLOLSAVTLQHEGTYTCETVTPBGNFKNDYLOVLTPEVT 153

CC 180 LFCRRNTAVCAVAKGAPPAQISWIPEDGCAIKQRYWNSNGTVKSTCHWEVHNVSTTC 239

CC 154 YFPEKRNNAVCEAMAGKPAQISWIPEDGCVTTSESHSNGTVKSTCHWEVHNVSTTC 213

CC 240 HVSLTNGKSLYIELPVPKAKSKAKLYPIYIITLITLVGFIMLKVNGCKRYLKNK 259

CC 214 IVSLTNGQSLIEL--SRGQDQLIGSTIYQYIIISIIILITGICILKISGCKRCLPK 271

CC 300 TESTPVEEDEMOPYASYTEKNPPLYDTTNKVASQALQSEVD-TDLHTL 348

CC 272 LEATSAIEDDEMOPYASYTEKSNPLYDTVTTKVAFAVSGEVNGTDCITL 321

RESULT 4

MOXR MOUSE STANDARD; PRT; 530 AA.

AC P32507; 062096;

AD 01-OCT-1993 (Rel. 27, Created)

DT 16-OCT-2001 (Rel. 40, Last sequence update)

DT 15-MAR-2004 (Rel. 43, Last annotation update)

DE Poliovirus receptor related protein 2 precursor (Murine herpesvirus entry protein B) (mvheb) (Nectin 2) (Poliovirus receptor homolog).

CC modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announcement> or send an email to license@isb-sib.ch).

CC -----

CC EMBL: AF231393; AAF98556.1; -

CC EMBL: BC052682; AAH52682.1; -

CC MGI: 1889024; Mox2r.

CC InterPro: IPR007110; Ig-Like.

CC InterPro: IPR003599; Ig.

CC SMART: SM00409; Ig, 1.

CC PROSITE: PS50835; Ig Like; 1.

CC Transmembrane, Receptor; Glycoprotein; Signal.

CC SIGNAL

CC CHAIN 1 25

CC DOMAIN 26 238

CC TRANSMEM 239 259

CC DOMAIN 260 326

CC DOMAIN 51 136

CC DOMAIN 138 229

CC DISULFID 158 129

CC CARBOHYD 164 213

CC CARBOHYD 29 29

CC CARBOHYD 34 34

CC CARBOHYD 35 35

CC CARBOHYD 44 44

CC CARBOHYD 93 93

CC CARBOHYD 101 101

CC CARBOHYD 159 159

CC CARBOHYD 192 192

CC CARBOHYD 207 207

CC CARBOHYD 221 221

CC CARBOHYD 233 233

CC SEQUENCE 326 AA; 35504 MM; 02583959602F82A3 CRC64;

Query Match 48.7%; Score 899.5; DB 1; Length 326;

Best Local Similarity 53.4%; Pred. No. 2, 9e-70;

Matches 187; Conservative 43; Mismatches 89; Indels 31; Gaps 5;

CC 1 MLCPPWRTANGLGLITLITFLVAREAGAAQPNNSIMLQTSKENHALASSLCMDCKQITQ- 59

CC 1 MFCPPRTSALAVLLINGVF-----AGSSCTDKNQTTON 34

CC 60 NYSKVLAEVNTSPVKNATNAVLCPPIALRNLIITWEIILGQSSCTKAYKENEYK 119

CC 35 NSSSPPLQVNTTVSVQIGTKALCCFSIPFKAVLLITWIKRGLPSCTIAYKVDI-KTN 93

CC 120 ETNCTDERITWVSRPQNSDLOIRPVALTHDGYRCIMVTPDGNFRRGYHLQVLTPEVT 179

CC 94 ETSCLGRNITWASTPDHSPLOLSAVTLQHEGTYTCETVTPBGNFKNDYLOVLTPEVT 153

CC 180 LFCRRNTAVCAVAKGAPPAQISWIPEDGCAIKQRYWNSNGTVKSTCHWEVHNVSTTC 239

CC 154 YFPEKRNNAVCEAMAGKPAQISWIPEDGCVTTSESHSNGTVKSTCHWEVHNVSTTC 213

CC 240 HVSLTNGKSLYIELPVPKAKSKAKLYPIYIITLITLVGFIMLKVNGCKRYLKNK 259

CC 214 IVSLTNGQSLIEL--SRGQDQLIGSTIYQYIIISIIILITGICILKISGCKRCLPK 271

CC 300 TESTPVEEDEMOPYASYTEKNPPLYDTTNKVASQALQSEVD-TDLHTL 348

CC 272 LEATSAIEDDEMOPYASYTEKSNPLYDTVTTKVAFAVSGEVNGTDCITL 321

RESULT 4

MOXR MOUSE STANDARD; PRT; 530 AA.

AC P32507; 062096;

AD 01-OCT-1993 (Rel. 27, Created)

DT 16-OCT-2001 (Rel. 40, Last sequence update)

DT 15-MAR-2004 (Rel. 43, Last annotation update)

DE Poliovirus receptor related protein 2 precursor (Murine herpesvirus entry protein B) (mvheb) (Nectin 2) (Poliovirus receptor homolog).

GN PVRL2 OR PVS OR PVR OR MPH.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A. (ISOFORM ALPHA).
RX MEDLINE=92219365; PubMed=1560525;
RA Morrison M.E., Racanietello V.R.;
RT "Molecular cloning and expression of a murine homolog of the human
RT poliovirus receptor gene";
RL J. Virol. 66:2807-2813(1992).
RN [2]
RP SEQUENCE FROM N.A. (ISOFORM BETA).
RX MEDLINE=C57BL/6; TISSUE=Brain;
RA MEDLINE=94179228; PubMed=813569;
RT Aoki J., Koike S., Ise I., Sato-Yoshida Y., Nomoto A.;
RT "Amino acid residues on human poliovirus receptor involved in
RT interaction with poliovirus";
RL J. Biol. Chem. 269:8431-8438(1994).
RN [3]
RP SEQUENCE FROM N.A. (ISOFORM BETA).
RX STRAIN=FVB/N; TISSUE=Colon;
RA MEDLINE=92388257; PubMed=12477932;
RA Straubeberg R.J., Felngold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shennan C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhac N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
RA Diatchenko L., Marsina K., Farmer A.A., Rubin G.M., Hong L.,
RA Scapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Schetz T.E.,
RA Brownstein W.J., Udell T.B., Toshiyuki S., Carninci F., Prange C.,
RA Rana S.S., Loquellano N.A., Peters G.J., Adamson R.D., Mullaly S.J.,
RA Bobak S.A., McWay P.J., McKernan K.J., Malek U.A., Gunaratne P.H.,
RA Richards S., Coleman K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahney J., Helton E., Keltman M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakeley R.W., Touchman D.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Buttecherfield Y., Schein J.E., Jones S.J.M., Marra M.A.;
RA Schnerch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [4]
RP CHARACTERIZATION.
RX MEDLINE=99214397; PubMed=10196354;
RA Shukla D., Rowe C.L., Dong Y., Racanietello V.R., Spear P.G.;
RT "The murine homolog (Mph) of human herpesvirus entry protein B (HvEb)
RT mediates entry of pseudorabies virus but not herpes simplex virus
RT types 1 and 2.";
RL J. Virol. 73:4493-4497(1999).
RN [5]
RP FUNCTION: RECEPTOR FOR ALPHAHERPESVIRUS (SUCH AS MURINE HSV) ENTRY
CC INTO CELLS.
CC SUBCELLULAR LOCATION: Type I membrane protein.
CC -1- ALTERNATIVE PRODUCTS:
CC Event=Alternative splicing; Named isoforms=2;
CC Name=Beta;
CC IsoId=P32507-1; Sequence=Displayed;
CC Name=Alpha;
CC IsoId=P32507-2; Sequence=VSP 002630, VSP 002631;
CC TISSUE SPECIFICITY: Brain, spinal cord, spleen, kidney, heart and
CC liver.
CC -1- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
CC -1- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (see <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).

[illegible]

OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 RN NCI_TaxID:9606;
 RN [1]
 RP SEQUENCE FROM N.A. (ISOFORM DELTA).
 RX MEDLINE=95347610; PubMed=7622062;
 RA Eberle F., Dubreuil P., Mattei M.-G., Devillard E., Lopez M.,
 RT "the human PRK2 gene, related to the human poliovirus receptor gene
 RL (PVR), is the true homolog of the murine MPH gene.";
 RN Gene 159:267-272(1995).
 RN [2]
 RP SEQUENCE FROM N.A. (ISOFORM ALPHA).
 RX MEDLINE=98321161; PubMed=9657005;
 RA Warner M.S., Geraghty R.J., Martinez W.M., Montgomery R.I.,
 RT Whitbeck J.C., Xu R., Eisenberg R.J., Cohen G.H., Spear P.G.,
 RT "A cell surface protein with herpesvirus entry activity (HvEA) confers
 RT susceptibility to infection by mutants of herpes simplex virus type
 RL 1, herpes simplex virus type 2, and pseudorabies virus.";
 RN Virology 246:179-189(1998).
 RN [3]
 RP SEQUENCE FROM N.A. (ISOFORM ALPHA).
 RX TISSUE=Brain;
 RX MEDLINE=22386257; PubMed=12477932;
 RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klausner R.D., Collins P.S., Wagner L., Shenner C.M., Schuler G.D.,
 RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Hsieh F.,
 RA Datchenko L., Marusina K., Farmer A.S., Rubin G.J., Hong L.,
 RA Stedman M., Soares M.B., Bonaldi M.P., Casavant T.L., Scheetz T.E.,
 RA Brownstein W.J., Usdin T.B., Toshiyuki S., Carninci P., Frange C.J.,
 RA Rana S.S., Loughellano N.A., Peters G.J., Abramson R.D., Mullaly S.J.,
 RA Bosak S.A., McEwen P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hilyk S.W.,
 RA Villalón D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
 RA Fahey J., Helton E., Kettelman M., Madan A., Rodriguez S., Sanchez A.,
 RA Whiting R., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schultz J., Myers R.M.,
 RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smallus D.E.,
 RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.,
 RT "Generation and initial analysis of more than 15,000 full-length
 RT human and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
 RN [4]
 RP SEQUENCE OF 31-538 FROM N.A.
 RA Yoshiura K., Murray J.C.,
 RT "A transpositional map in the region of 19q13 derived using direct
 RT sequencing and exon trapping.";
 RL Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE OF 449-538 FROM N.A.
 RX MEDLINE=99449047; PubMed=10520737;
 RA Freitas E.M., Zhang W.J., Lalonde J.P., Tay G.K., Gaudieri S.,
 RA Ashworth J.K., Van Bockmeier P.M., Dawkins R.L.,
 RT "Sequencing of 42kb of the Apo E-C2 gene cluster reveals a new gene:
 RT PEREC1.";
 RL DNA Seq. 9:89-101(1998).
 RL [6]
 CC -1- FUNCTION: RECEPTOR FOR ALPHAHERPESVIRUS (HSV-1, HSV-2 AND
 CC PSEUDORABIES VIRUS) ENTRY INTO CELLS.
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -1- ALTERNATIVE PRODUCTS:
 CC Event=Alternative splicing; Named isoforms=2;
 CC Name=Delta;
 CC IsoId=Q92692-1; Sequence=Displayed;
 CC Name=Alpha;
 CC IsoId=Q92692-2; Sequence=VSP_002628, VSP_002629;
 CC -1- TISSUE SPECIFICITY: Ubiquitous.
 CC -1- SIMILARITY: Contains 1 immunoglobulin-like V-type domain.
 CC -1- SIMILARITY: Contains 2 immunoglobulin-like C2-type domains.
 CC -1- DATABASE: NAME=PROV; NOTE=PROV 1:74-77(2000).
 CC WWW="http://www.ncbi.nlm.nih.gov/prov/guide/204270028_g.htm".
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -

RESULT 6
BUTY MOUSE
ID BUTY MOUSE STANDARD; PRT; 524 AA.
AC 062556; P97392;
DT 01-NOV-1997 (Rel. 35, Created)
DT 15-JUL-1998 (Rel. 36, Last sequence update)
DT 15-MAR-2004 (Rel. 43, Last annotation update)
DE Butyrophilin precursor (BT) (Butyrophilin subfamily 1 member A1).
GN BTN1A1 OR BTN.
OS Mus musculus (mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=129; TISSUE=Mammary gland;
RX MEDLINE=97148936; PubMed=8955761;
RA Ogg S.L., Komaragiri M.V.S., Mather I.H.;
RT "Structural organization and mammary-specific expression of the
RT butyrophilin gene.";
RL Mamm. Genome 7:900-905 (1996).
RN [2]
RP SEQUENCE OF 39-487 FROM N.A.
RC TISSUE=Mammary gland;
RX MEDLINE=96125722; PubMed=8541302;
RA Ichii T., Aoki N., Noda A., Adachi T., Nakamura R., Matsuda T.;
RT "Carboxy-terminal cytoplasmic domain of mouse butyrophilin
RT specifically associates with a 150-kDa protein of mammary epithelial
RT cells and milk fat globule membrane.";
RL Biochim. Biophys. Acta 1245:285-292 (1995).
CC -1- FUNCTION: May function in the secretion of milk-fat droplets. It
CC may act as a specific membrane-associated receptor for the
CC association of cytoplasmic droplets with the apical plasma
CC membrane (by similarity).
CC -1- SUBUNIT: Seems to associate with xanthine dehydrogenase/oxidase.
CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
CC -1- TISSUE SPECIFICITY: Expressed in mammary tissue and secreted in
CC association with the milk-fat-globule membrane during lactation.
CC -1- DEVELOPMENTAL STAGE: Expression increases during the last half of
CC pregnancy and is maximal during lactation.
CC -1- SIMILARITY: Belongs to the immunoglobulin superfamily. BTN/MOG
CC family.
CC -1- SIMILARITY: Contains 2 immunoglobulin-like V-type domains.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@isb-sib.ch).
CC -----
DR EMBL: U67065; AAB51034.1; -;
DR EMBL: S80642; AAB55893.1; -;
DR MGD: MGI:103116; Bm1a1.1; -;
DR InterPro: IPR001870; B502.
DR InterPro: IPR003596; IG-like.
DR InterPro: IPR006574; PRV.
DR InterPro: IPR003877; SPRV_receptor.
DR Pfam: PF00047; IG_1.
DR Pfam: PF00623; SPRV_1.
DR SMART: SM00406; IGV_1.
DR SMART: SM00589; PRV_1.
DR SMART: SM00449; SPRV_1.
DR PROSITE: PS50835; IG_LIKE; 2.
KW Transmembrane; Glycoprotein; 1.
KW SIGNAL 26
FT CHAIN 1 524
FT DOMAIN 27 247 BUTYROPHILIN.
FT TRANSMEM 248 268 EXTRACELLULAR (POTENTIAL).
FT DOMAIN 269 524 CYTOPLASMIC (POTENTIAL).

FT DOMAIN 29 141 IG-LIKE V-TYPE 1.
FT DOMAIN 149 235 IG-LIKE V-TYPE 2.
FT CARBOHYD 56 56 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 216 216 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CONFLICT 46 46 D -> DD (IN REF. 2).
FT CONFLICT 117 117 V -> F (IN REF. 2).
FT CONFLICT 191 191 E -> D (IN REF. 2).
FT CONFLICT 210 210 R -> S (IN REF. 2).
FT CONFLICT 363 363 T -> K (IN REF. 2).
FT CONFLICT 408 408 SL -> FF (IN REF. 2).
FT CONFLICT 413 414 PRRV -> LAEY (IN REF. 2).
FT CONFLICT 420 423 DIPSPGEGCTSGDKDT -> GHSIVPAGRLYFMRQRH
FT CONFLICT 492 509 (IN REF. 2).
SQ SEQUENCE 524 AA; 58406 MW; 333F8DE2C7704480 CRC64;
Query Match 6.6%; Score 122.5; DB 1; Length 524;
Best Local Similarity 19.0%; Pred. No. 0.006;
Matches 73; Conservative 59; Mismatches 155; Indels 97; Gaps 15;
QY 1 MLCWRTRANIGLLILITFLVAEAEAGAPNNISLMDTSKENTAKLASSLCMDKQTON 60
DB 1 MAVPTNSCLVCLTTLTLVQLPLTDSA-----PVDYAP 35
QY 61 YSKVLAENVTSWPFYMATNAVLCC--PPIALRLIITWEIILRGQSCTRAYRKETNET 118
DB 36 CEPYALV-----GSDAELTGFSPNASEYEMELW--FRQTRSTAVLYLRDGOEQ 84
QY 119 KEINCTBER---ITWSRPDQNSDLQIRYVALTHDGYRCINWTPGNHRYGLQVLV 174
DB 85 EGQOMTYRGRATLATAGLDDGRATLIRVRSDDQSEYRCLEFNDPFEAAVYLVA 144
QY 175 T--PEV--TLFQNRNTAYCAVAKPAQISV-----IPGDCATQGEYWSNGTVT 222
DB 145 VGSDPQISMVQENGEHELETSQWPEPQVQWRGTNGREMLP--STSEKKHNEELFT 202
QY 223 YKSTCHWEHNVSTVTCVSHLTKNSLYIEL-LPVGAKKSKALYPIYLITLITLIV 281
DB 203 VAVSMTRDSSIKNMSCIONILGQKEVEISLPAPFVR---LTPWIVANAILIAL 258
QY 282 GFI-----W-----LKVNGCRKYKTKSTFEVEDEMOFY 314
DB 259 GFLITGSIFFTWKLYKRSRKKEFGSKERLLLELNCKTVLHEVDV--LDPDTAHPH 316
QY 315 ASYTEKNNPLDYTTNNKYKAGQALQ 338
DB 317 LF-----LYEDSKSVRLDSRQ 333
RESULT 7
NCBI_BOVIN
ID NCBI_BOVIN STANDARD; PRT; 853 AA.
AC P31836;
DT 01-JUL-1993 (Rel. 26, Created)
DT 01-JUL-1993 (Rel. 26, Last sequence update)
DT 10-OCT-2003 (Rel. 42, Last annotation update)
DE Neural cell adhesion molecule 1, 140 kDa isoform precursor (N-CAM 140)
DE (NCAM-140).
GN NCAM1 OR NCAM.
OS Bos taurus (bovine).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9913;
RN [1]
RP SEQUENCE FROM N.A., AND PARTIAL SEQUENCE.
RC TISSUE=Brain cortex.
RX MEDLINE=89378239; PubMed=2776887;
RA Lipkin V.M., Khramtsov N.V., Andreeva S.G., Moshnyakov M.V.,
RA Petukhova G.V., Rakhitina T.V., Feshchenko E.A., Ishchenko K.A.,
RA Mirzoeva S.F., Chernova N.N., Dranysheva S.M.;
RT "Calcmodulin-independent bovine brain adenylate cyclase. Amino acid
RT sequence and nucleotide sequence of the corresponding cDNA.";

CC neuron-neuron adhesion, neurite fasciculation, outgrowth of
 CC neurites, etc.
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- ALTERNATIVE PRODUCTS:
 CC Event-Alternative splicing; Named isoforms=3;
 CC Name=N-CAM 120;
 CC IsoId=P13592-2; Sequence=Displayed;
 CC Name=N-CAM 140;
 CC IsoId=P13591-1; Sequence=External;
 CC Name=C; Synonyms=Secreted;
 CC IsoId=P13592-1; Sequence=VSP_002587;
 CC -1- SIMILARITY: Contains 5 Immunoglobulin-like C2-type domains.
 CC -1- SIMILARITY: Contains 2 fibronectin type III domains.
 CC -1- DATABASE: NAME=PRO; NOTE=CD guide CDS6 entry;
 CC WWW="http://www.ncbi.nlm.nih.gov/prov/cd/cds6.htm".
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL; X15641; CA34739.1; -;
 DR EMBL; M17409; AAAS912.1; -;
 DR EMBL; M22094; AAAS910.1; -;
 DR EMBL; M22092; AAAS911.1; -;
 DR EMBL; M22091; AAAS911.1; JOINED.
 DR PIR; A31635; A31635.
 DR PIR; S07784; IJHUNG.
 DR Genew; HGNC:7656; NCAM1.
 DR MW; 116930; -;
 DR GO; GO:0016021; C:integral to membrane; TAS.
 DR GO; GO:0005886; C:Plasma membrane; TAS.
 DR InterPro; IPR008957; FN_III-like.
 DR InterPro; IPR003961; FN_III.
 DR InterPro; IPR007110; IG_II-like.
 DR InterPro; IPR003588; IG_C2.
 DR Pfam; PF00041; fn3; 2.
 DR Pfam; PF00047; Ig; 5.
 DR SMART; SM00060; FN3; 2.
 DR SMART; SM00408; IGc2; 5.
 DR PROSITE; PSS0835; IG_LIKE; 5.
 KM Immunoglobulin domain; Cell adhesion; Glycoprotein; Repeat; Signal;
 KM GPI-anchor; Alternative splicing.
 FT SIGNAL
 FT CHAIN
 FT 1
 FT 19
 FT 20 761
 FT 111
 FT 116
 FT 122
 FT 123
 FT 124
 FT 125
 FT 126
 FT 127
 FT 128
 FT 129
 FT 130
 FT 131
 FT 132
 FT 133
 FT 134
 FT 135
 FT 136
 FT 137
 FT 138
 FT 139
 FT 140
 FT 141
 FT 142
 FT 143
 FT 144
 FT 145
 FT 146
 FT 147
 FT 148
 FT 149
 FT 150
 FT 151
 FT 152
 FT 153
 FT 154
 FT 155
 FT 156
 FT 157
 FT 158
 FT 159
 FT 160
 FT 161
 FT 162
 FT 163
 FT 164
 FT 165
 FT 166
 FT 167
 FT 168
 FT 169
 FT 170
 FT 171
 FT 172
 FT 173
 FT 174
 FT 175
 FT 176
 FT 177
 FT 178
 FT 179
 FT 180
 FT 181
 FT 182
 FT 183
 FT 184
 FT 185
 FT 186
 FT 187
 FT 188
 FT 189
 FT 190
 FT 191
 FT 192
 FT 193
 FT 194
 FT 195
 FT 196
 FT 197
 FT 198
 FT 199
 FT 200
 FT 201
 FT 202
 FT 203
 FT 204
 FT 205
 FT 206
 FT 207
 FT 208
 FT 209
 FT 210
 FT 211
 FT 212
 FT 213
 FT 214
 FT 215
 FT 216
 FT 217
 FT 218
 FT 219
 FT 220
 FT 221
 FT 222
 FT 223
 FT 224
 FT 225
 FT 226
 FT 227
 FT 228
 FT 229
 FT 230
 FT 231
 FT 232
 FT 233
 FT 234
 FT 235
 FT 236
 FT 237
 FT 238
 FT 239
 FT 240
 FT 241
 FT 242
 FT 243
 FT 244
 FT 245
 FT 246
 FT 247
 FT 248
 FT 249
 FT 250
 FT 251
 FT 252
 FT 253
 FT 254
 FT 255
 FT 256
 FT 257
 FT 258
 FT 259
 FT 260
 FT 261
 FT 262
 FT 263
 FT 264
 FT 265
 FT 266
 FT 267
 FT 268
 FT 269
 FT 270
 FT 271
 FT 272
 FT 273
 FT 274
 FT 275
 FT 276
 FT 277
 FT 278
 FT 279
 FT 280
 FT 281
 FT 282
 FT 283
 FT 284
 FT 285
 FT 286
 FT 287
 FT 288
 FT 289
 FT 290
 FT 291
 FT 292
 FT 293
 FT 294
 FT 295
 FT 296
 FT 297
 FT 298
 FT 299
 FT 300
 FT 301
 FT 302
 FT 303
 FT 304
 FT 305
 FT 306
 FT 307
 FT 308
 FT 309
 FT 310
 FT 311
 FT 312
 FT 313
 FT 314
 FT 315
 FT 316
 FT 317
 FT 318
 FT 319
 FT 320
 FT 321
 FT 322
 FT 323
 FT 324
 FT 325
 FT 326
 FT 327
 FT 328
 FT 329
 FT 330
 FT 331
 FT 332
 FT 333
 FT 334
 FT 335
 FT 336
 FT 337
 FT 338
 FT 339
 FT 340
 FT 341
 FT 342
 FT 343
 FT 344
 FT 345
 FT 346
 FT 347
 FT 348
 FT 349
 FT 350
 FT 351
 FT 352
 FT 353
 FT 354
 FT 355
 FT 356
 FT 357
 FT 358
 FT 359
 FT 360
 FT 361
 FT 362
 FT 363
 FT 364
 FT 365
 FT 366
 FT 367
 FT 368
 FT 369
 FT 370
 FT 371
 FT 372
 FT 373
 FT 374
 FT 375
 FT 376
 FT 377
 FT 378
 FT 379
 FT 380
 FT 381
 FT 382
 FT 383
 FT 384
 FT 385
 FT 386
 FT 387
 FT 388
 FT 389
 FT 390
 FT 391
 FT 392
 FT 393
 FT 394
 FT 395
 FT 396
 FT 397
 FT 398
 FT 399
 FT 400
 FT 401
 FT 402
 FT 403
 FT 404
 FT 405
 FT 406
 FT 407
 FT 408
 FT 409
 FT 410
 FT 411
 FT 412
 FT 413
 FT 414
 FT 415
 FT 416
 FT 417
 FT 418
 FT 419
 FT 420
 FT 421
 FT 422
 FT 423
 FT 424
 FT 425
 FT 426
 FT 427
 FT 428
 FT 429
 FT 430
 FT 431
 FT 432
 FT 433
 FT 434
 FT 435
 FT 436
 FT 437
 FT 438
 FT 439
 FT 440
 FT 441
 FT 442
 FT 443
 FT 444
 FT 445
 FT 446
 FT 447
 FT 448
 FT 449
 FT 450
 FT 451
 FT 452
 FT 453
 FT 454
 FT 455
 FT 456
 FT 457
 FT 458
 FT 459
 FT 460
 FT 461
 FT 462
 FT 463
 FT 464
 FT 465
 FT 466
 FT 467
 FT 468
 FT 469
 FT 470
 FT 471
 FT 472
 FT 473
 FT 474
 FT 475
 FT 476
 FT 477
 FT 478
 FT 479
 FT 480
 FT 481
 FT 482
 FT 483
 FT 484
 FT 485
 FT 486
 FT 487
 FT 488
 FT 489
 FT 490
 FT 491
 FT 492
 FT 493
 FT 494
 FT 495
 FT 496
 FT 497
 FT 498
 FT 499
 FT 500
 FT 501
 FT 502
 FT 503
 FT 504
 FT 505
 FT 506
 FT 507
 FT 508
 FT 509
 FT 510
 FT 511
 FT 512
 FT 513
 FT 514
 FT 515
 FT 516
 FT 517
 FT 518
 FT 519
 FT 520
 FT 521
 FT 522
 FT 523
 FT 524
 FT 525
 FT 526
 FT 527
 FT 528
 FT 529
 FT 530
 FT 531
 FT 532
 FT 533
 FT 534
 FT 535
 FT 536
 FT 537
 FT 538
 FT 539
 FT 540
 FT 541
 FT 542
 FT 543
 FT 544
 FT 545
 FT 546
 FT 547
 FT 548
 FT 549
 FT 550
 FT 551
 FT 552
 FT 553
 FT 554
 FT 555
 FT 556
 FT 557
 FT 558
 FT 559
 FT 560
 FT 561
 FT 562
 FT 563
 FT 564
 FT 565
 FT 566
 FT 567
 FT 568
 FT 569
 FT 570
 FT 571
 FT 572
 FT 573
 FT 574
 FT 575
 FT 576
 FT 577
 FT 578
 FT 579
 FT 580
 FT 581
 FT 582
 FT 583
 FT 584
 FT 585
 FT 586
 FT 587
 FT 588
 FT 589
 FT 590
 FT 591
 FT 592
 FT 593
 FT 594
 FT 595
 FT 596
 FT 597
 FT 598
 FT 599
 FT 600
 FT 601
 FT 602
 FT 603
 FT 604
 FT 605
 FT 606
 FT 607
 FT 608
 FT 609
 FT 610
 FT 611
 FT 612
 FT 613
 FT 614
 FT 615
 FT 616
 FT 617
 FT 618
 FT 619
 FT 620
 FT 621
 FT 622
 FT 623
 FT 624
 FT 625
 FT 626
 FT 627
 FT 628
 FT 629
 FT 630
 FT 631
 FT 632
 FT 633
 FT 634
 FT 635
 FT 636
 FT 637
 FT 638
 FT 639
 FT 640
 FT 641
 FT 642
 FT 643
 FT 644
 FT 645
 FT 646
 FT 647
 FT 648
 FT 649
 FT 650
 FT 651
 FT 652
 FT 653
 FT 654
 FT 655
 FT 656
 FT 657
 FT 658
 FT 659
 FT 660
 FT 661
 FT 662
 FT 663
 FT 664
 FT 665
 FT 666
 FT 667
 FT 668
 FT 669
 FT 670
 FT 671
 FT 672
 FT 673
 FT 674
 FT 675
 FT 676
 FT 677
 FT 678
 FT 679
 FT 680
 FT 681
 FT 682
 FT 683
 FT 684
 FT 685
 FT 686
 FT 687
 FT 688
 FT 689
 FT 690
 FT 691
 FT 692
 FT 693
 FT 694
 FT 695
 FT 696
 FT 697
 FT 698
 FT 699
 FT 700
 FT 701
 FT 702
 FT 703
 FT 704
 FT 705
 FT 706
 FT 707
 FT 708
 FT 709
 FT 710
 FT 711
 FT 712
 FT 713
 FT 714
 FT 715
 FT 716
 FT 717
 FT 718
 FT 719
 FT 720
 FT 721
 FT 722
 FT 723
 FT 724
 FT 725
 FT 726
 FT 727
 FT 728
 FT 729
 FT 730
 FT 731
 FT 732
 FT 733
 FT 734
 FT 735
 FT 736
 FT 737
 FT 738
 FT 739
 FT 740
 FT 741
 FT 742
 FT 743
 FT 744
 FT 745
 FT 746
 FT 747
 FT 748
 FT 749
 FT 750
 FT 751
 FT 752
 FT 753
 FT 754
 FT 755
 FT 756
 FT 757
 FT 758
 FT 759
 FT 760
 FT 761
 FT 762
 FT 763
 FT 764
 FT 765
 FT 766
 FT 767
 FT 768
 FT 769
 FT 770
 FT 771
 FT 772
 FT 773
 FT 774
 FT 775
 FT 776
 FT 777
 FT 778
 FT 779
 FT 780
 FT 781
 FT 782
 FT 783
 FT 784
 FT 785
 FT 786
 FT 787
 FT 788
 FT 789
 FT 790
 FT 791
 FT 792
 FT 793
 FT 794
 FT 795
 FT 796
 FT 797
 FT 798
 FT 799
 FT 800
 FT 801
 FT 802
 FT 803
 FT 804
 FT 805
 FT 806
 FT 807
 FT 808
 FT 809
 FT 810
 FT 811
 FT 812
 FT 813
 FT 814
 FT 815
 FT 816
 FT 817
 FT 818
 FT 819
 FT 820
 FT 821
 FT 822
 FT 823
 FT 824
 FT 825
 FT 826
 FT 827
 FT 828
 FT 829
 FT 830
 FT 831
 FT 832
 FT 833
 FT 834
 FT 835
 FT 836
 FT 837
 FT 838
 FT 839
 FT 840
 FT 841
 FT 842
 FT 843
 FT 844
 FT 845
 FT 846
 FT 847
 FT 848
 FT 849
 FT 850
 FT 851
 FT 852
 FT 853
 FT 854
 FT 855
 FT 856
 FT 857
 FT 858
 FT 859
 FT 860
 FT 861
 FT 862
 FT 863
 FT 864
 FT 865
 FT 866
 FT 867
 FT 868
 FT 869
 FT 870
 FT 871
 FT 872
 FT 873
 FT 874
 FT 875
 FT 876
 FT 877
 FT 878
 FT 879
 FT 880
 FT 881
 FT 882
 FT 883
 FT 884
 FT 885
 FT 886
 FT 887
 FT 888
 FT 889
 FT 890
 FT 891
 FT 892
 FT 893
 FT 894
 FT 895
 FT 896
 FT 897
 FT 898
 FT 899
 FT 900
 FT 901
 FT 902
 FT 903
 FT 904
 FT 905
 FT 906
 FT 907
 FT 908
 FT 909
 FT 910
 FT 911
 FT 912
 FT 913
 FT 914
 FT 915
 FT 916
 FT 917
 FT 918
 FT 919
 FT 920
 FT 921
 FT 922
 FT 923
 FT 924
 FT 925
 FT 926
 FT 927
 FT 928
 FT 929
 FT 930
 FT 931
 FT 932
 FT 933
 FT 934
 FT 935
 FT 936
 FT 937
 FT 938
 FT 939
 FT 940
 FT 941
 FT 942
 FT 943
 FT 944
 FT 945
 FT 946
 FT 947
 FT 948
 FT 949
 FT 950
 FT 951
 FT 952
 FT 953
 FT 954
 FT 955
 FT 956
 FT 957
 FT 958
 FT 959
 FT 960
 FT 961
 FT 962
 FT 963
 FT 964
 FT 965
 FT 966
 FT 967
 FT 968
 FT 969
 FT 970
 FT 971
 FT 972
 FT 973
 FT 974
 FT 975
 FT 976
 FT 977
 FT 978
 FT 979
 FT 980
 FT 981
 FT 982
 FT 983
 FT 984
 FT 985
 FT 986
 FT 987
 FT 988
 FT 989
 FT 990
 FT 991
 FT 992
 FT 993
 FT 994
 FT 995
 FT 996
 FT 997
 FT 998
 FT 999
 FT 1000
 FT 1001
 FT 1002
 FT 1003
 FT 1004
 FT 1005
 FT 1006
 FT 1007
 FT 1008
 FT 1009
 FT 1010
 FT 1011
 FT 1012
 FT 1013
 FT 1014
 FT 1015
 FT 1016
 FT 1017
 FT 1018
 FT 1019
 FT 1020
 FT 1021
 FT 1022
 FT 1023
 FT 1024
 FT 1025
 FT 1026
 FT 1027
 FT 1028
 FT 1029
 FT 1030
 FT 1031
 FT 1032
 FT 1033
 FT 1034
 FT 1035
 FT 1036
 FT 1037
 FT 1038
 FT 1039
 FT 1040
 FT 1041
 FT 1042
 FT 1043
 FT 1044
 FT 1045
 FT 1046
 FT 1047
 FT 1048
 FT 1049
 FT 1050
 FT 1051
 FT 1052
 FT 1053
 FT 1054
 FT 1055
 FT 1056
 FT 1057
 FT 1058
 FT 1059
 FT 1060
 FT 1061
 FT 1062
 FT 1063
 FT 1064
 FT 1065
 FT 1066
 FT 1067
 FT 1068
 FT 1069
 FT 1070
 FT 1071
 FT 1072
 FT 1073
 FT 1074
 FT 1075
 FT 1076
 FT 1077
 FT 1078
 FT 1079
 FT 1080
 FT 1081
 FT 1082
 FT 1083
 FT 1084
 FT 1085
 FT 1086
 FT 1087
 FT 1088
 FT 1089
 FT 1090
 FT 1091
 FT 1092
 FT 1093
 FT 1094
 FT 1095
 FT 1096
 FT 1097
 FT 1098
 FT 1099
 FT 1100
 FT 1101
 FT 1102
 FT 1103
 FT 1104
 FT 1105
 FT 1106
 FT 1107
 FT 1108
 FT 1109
 FT 1110
 FT 1111
 FT 1112
 FT 1113
 FT 1114
 FT 1115
 FT 1116
 FT 1117
 FT 1118
 FT 1119
 FT 1120
 FT 1121
 FT 1122
 FT 1123
 FT 1124
 FT 1125
 FT 1126
 FT 1127
 FT 1128
 FT 1129
 FT 1130
 FT 1131
 FT 1132
 FT 1133
 FT 1134
 FT 1135
 FT 1136
 FT 1137
 FT 1138
 FT 1139
 FT 1140
 FT 1141
 FT 1142
 FT 1143
 FT 1144
 FT 1145
 FT 1146
 FT 1147
 FT 1148
 FT 1149
 FT 1150
 FT 1151
 FT 1152
 FT 1153
 FT 1154
 FT 1155
 FT 1156
 FT 1157
 FT 1158
 FT 1159
 FT 1160
 FT 1161
 FT 1162
 FT 1163
 FT 1164
 FT 1165
 FT 1166
 FT 1167
 FT 1168
 FT 1169
 FT 1170
 FT 1171
 FT 1172
 FT 1173
 FT 1174
 FT 1175
 FT 1176
 FT 1177
 FT 1178
 FT 1179
 FT 1180
 FT 1181
 FT 1182
 FT 1183
 FT 1184
 FT 1185
 FT 1186
 FT 1187
 FT 1188
 FT 1189
 FT 1190
 FT 1191
 FT 1192
 FT 1193
 FT 1194
 FT 1195
 FT 1196
 FT 1197
 FT 1198
 FT 1199
 FT 1200
 FT 1201
 FT 1202
 FT 1203
 FT 1204
 FT 1205
 FT 1206
 FT 1207
 FT 1208
 FT 1209
 FT 1210
 FT 1211
 FT 1212
 FT 1213
 FT 1214
 FT 1215
 FT 1216
 FT 1217
 FT 1218
 FT 1219
 FT 1220
 FT 1221
 FT 1222
 FT 1223
 FT 1224
 FT 1225
 FT 1226
 FT 1227
 FT 1228
 FT 1229
 FT 1230
 FT 1231
 FT 1232
 FT 1233
 FT 1234
 FT 1235
 FT 1236
 FT 1237
 FT 1238
 FT 1239
 FT 1240
 FT 1241
 FT 1242
 FT 1243
 FT 1244
 FT 1245
 FT 1246
 FT 1247
 FT 1248
 FT 1249
 FT 1250
 FT 1251
 FT 1252
 FT 1253
 FT 1254
 FT 1255
 FT 1256
 FT 1257
 FT 1258
 FT 1259
 FT 1260
 FT 1261
 FT 1262
 FT 1263
 FT 1264
 FT 1265
 FT 1266
 FT 1267
 FT 1268
 FT 1269
 FT 1270
 FT 1271
 FT 1272
 FT 1273
 FT 1274
 FT 1275
 FT 1276
 FT 1277
 FT 1278
 FT 1279
 FT 1280
 FT 1281
 FT 1282
 FT 1283
 FT 1284
 FT 1285
 FT 1286
 FT 1287
 FT 1288
 FT 1289
 FT 1290
 FT 1291
 FT 1292
 FT 1293
 FT 1294
 FT 1295
 FT 1296
 FT 1297
 FT 1298
 FT 1299
 FT 1300
 FT 1301
 FT 1302
 FT 1303
 FT 1304
 FT 1305
 FT 1306
 FT 1307
 FT 1308
 FT 1309
 FT 1310
 FT 1311
 FT 1312
 FT 1313
 FT 1314
 FT 1315
 FT 1316
 FT 1317
 FT 1318
 FT 1319
 FT 1320
 FT 1321
 FT 1322
 FT 1323
 FT 1324
 FT 1325
 FT 1326
 FT 1327
 FT 1328
 FT 1329
 FT 133

FT DISULFID 40 110 POTENTIAL.
 FT DISULFID 157 218 POTENTIAL.
 FT CARBOHYD 33 33 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 135 135 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 146 146 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 154 154 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 177 177 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 192 192 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 198 198 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 213 213 N-LINKED (GLCNAC. . .) (POTENTIAL).
 SQ SEQUENCE 330 AA; 37142 MW; 935CD65C57E3EE1 CRC64;

Query Match 6.5%; Score 119.5; DB 1; Length 330;
 Best Local Similarity 22.6%; Pred. No. 0.0063;
 Matches 77; Conservative 51; Mismatches 114; Indels 99; Gaps 18;

14 LITFLVLA-EAEGAAPNNISIMLOTSEKNNALASSSLCNDKQITONYSKYLAENVTSW 72
 9 LSVTFVWALLISGAA-----SLRIQAYFNKTA---DLPC---QPTNSQSSLSLWVFW 57

73 PYKMATNAVLCPPPLALNLIITTEIIRGOPSCTKAYKRETNCTKCTDEIITWVS 132
 58 QDOER-----LVLYELFL-----GREKEDNDPKITIGTS 87

133 RDQNSDLQIRPAVITHDGYRCIMWTPDGNFHRG-----YHLOVLYT---EV 178
 88 PFOESWNLQHVNOIKDKGVOCFV-----HHRGKGLVPIYQNNSELSTLANFTQPEI 141

179 TLFQNNRTA---VCKAVAGRP-AAQISWIEGDCATQOEWSNGYTVASTCMWEVHN 233
 142 TLTISNTRNSAINLTSSVQGYPEPKMFVKTENAT-TEY--GVGIEKSODNTVGLYN 198

234 VS-----TWTCHVSHLTGNKSLYTELLPV-----PGAKKSAKIYPIIILTI 275
 199 ISTSGSITSDIRNATITVCUL--TESTETYSQHEFIYAPAPVEVPEKRLIAVALTL 256

276 ILIT-IVGFIWLK-----VNGCRKYKLNKTESTPVE 307
 257 IYVGVIVLFLTKRKKEQOPGVCECETIKMDKAENEHVEE 297

Db

RESULT 11
 FAS2_DROME STANDARD; PRT; 873 AA.
 AC P34082; P34083; Q9W4M6;
 DT 01-FEB-1994 (Rel. 28, Created)
 DT 01-FEB-1994 (Rel. 28, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE Fasciclin II precursor (FAS II).
 GN FAS2 OR EG:EG0007.3 OR CG3665.
 OS Drosophila melanogaster (fruit fly).
 CC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 CC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 CC Eobrycoidea; Drosophilidae; Drosophila.
 OC NCBI_TaxID=7227;
 RN [1]
 RP SEQUENCE FROM N.A. (ISOFORMS 1 AND 2), FUNCTION, SUBCELLULAR LOCATION,
 RP AND TISSUE SPECIFICITY.
 RC STRAIN=Canton-S;
 RX MEDLINE=92005695; PubMed=1913818;
 RX Grenningloh G., Rehm E.J., Goodman C.S.;
 RT "Genetic analysis of growth cone guidance in Drosophila: fasciclin II
 RT functions as a neuronal recognition molecule.";
 RL Cell 67:45-57(1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Berkely;
 RX MEDLINE=20196006; PubMed=10731132;
 RX Adams M.D., Celinker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
 RX Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galie R.F.,
 RX George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
 RX Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
 RX Brandon R.C., Rogers Y.-H.C., Blazey R.G., Champe M., Pfeiffer B.D.,

RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
 RA April J.F., Agdayanti A., An H.-J., Andrews-Pfankuch C., Baldwin D.,
 RA Ballew R.M., Basu A., Baxendale U., Bayraktaroglu L., Beasley E.M.,
 RA Beeson K.Y., Benos P.V., Bertram B.P., Bhandari D., Bolshakov S.,
 RA Borokova D., Botchan M.R., Bouck J., Brokstein P., Brotler P.,
 RA Burris K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
 RA Cherry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
 RA de Pablo B., Delber A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
 RA Dodson K., Doup L.B., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
 RA Durbin K.J., Evangelista C.C., Ferraz C., Gelbart W.M., Glaser K.,
 RA Foster C., Gabriellian A.E., Garg N.S., Gelbart W.M., Glaser K.,
 RA Glodet A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
 RA Harris N.L., Harvey D.A., Helman T.J., Hernandez J.R., Houck J.,
 RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibeagwam C.,
 RA Jalali M., Kalush F., Kapen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
 RA Kamel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
 RA Lasko P., Lei Y., Levitsky A.A., Li J.H., Li Z., Liang Y., Lin X.,
 RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
 RA Morkulov G., Malshina N.V., Mobarry C., Morris J., Mostrefi A.,
 RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
 RA Nelson D.R., Nelson K.A., Nixon K., Nusskern D.R., Pacleb J.M.,
 RA Palazolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,
 RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
 RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
 RA Spter E., Spradling A.C., Stapleton M., Strong R., Sun E.,
 RA Svirskas R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
 RA Wang Z.-Y., Wassenaar D.A., Weinstein G.M., Weissbach J.,
 RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
 RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.,
 RA Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Zhu X., Smith H.O.,
 RA Giths R.A., Myers E.W., Rubin G.M., Venter J.C.;
 RA "The genome sequence of Drosophila melanogaster.";
 RL Science 287:2185-2195(2000).
 RN [3]
 RP REVISIONS, AND ALTERNATIVE SPLICING.
 RX MEDLINE=22426069; PubMed=12537572;
 RA Misra S., Crosby M.A., Mungall C.J., Matthews B.B., Campbell K.S.,
 RA Hradecky P., Huang Y., Kaminker J.S., Millburn G.H., Prochuk S.E.,
 RA Smith C.D., Tupy J.L., Whitfield E.J., Bayraktaroglu L., Bertram B.P.,
 RA Beltencourt B.R., Celinker S.E., de Grey A.D.N.U., Drysdale R.A.,
 RA Harris N.L., Richter J., Russo S., Schroeder A.U., Shu S.Q.,
 RA Stapleton M., Yamada C., Ashburner M., Gelbart W.M., Rubin G.M.,
 RA Lewis S.E.;
 RA "Annotation of the Drosophila melanogaster euchromatic genome: a
 RA systematic review.";
 RL Genome Biol. 3:RESEARCH0083.1-RESEARCH0083.22(2002).
 RN [4]
 RP SEQUENCE OF 22-873 FROM N.A.
 RC STRAIN=Oregon-R;
 RX MEDLINE=20196011; PubMed=10731137;
 RX Benos P.V., Galt M.K., Ashburner M., Murphy L., Harris D.,
 RX Barrell B.G., Ferraz C., Vidal S., Brun C., Demallies J., Cadieu E.,
 RX Dreano S., Gloux S., Lelaire V., Mortier S., Galibert F., Borokova D.,
 RX Minana B., Katiatos F.C., Louis C., Siden-Kiamos I., Bolshakov S.,
 RX Papagiannakis G., Spanos L., Cox S., Madueno E., de Pablo B.,
 RX Modolell J., Peter A., Schoettler U., Werner M., Mounkicci F.,
 RX Belvert N., Dowe G., Schaefer U., Jackle H., Bucheton A.,
 RX Callister D.M., Campbell L.A., Darlamiotou A., Henderson N.S.,
 RX McMillan P.J., Sallies C., Tait B.A., Valenti P., Saunders R.D.C.,
 RA Glover D.M.;
 RA "From sequence to chromosome: the tip of the X chromosome of D.
 RA melanogaster.";
 RL Science 287:2220-2222(2000).
 CC -1- FUNCTION: Neuronal recognition molecule for the MPI axon pathway,
 CC pathway recognition for axons during the development of nerve
 CC fascicles.
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein (isoform 1);
 CC attached to the membrane by a Gpi-anchor (isoform 2).
 CC -1- ALTERNATIVE PRODUCTS:
 CC Event-Alternative splicing. Named isoforms=3;
 CC Comment=Experimental confirmation may be lacking for some
 CC isoforms;
 CC Name=1; Synonyms=A, Membrane-linked;

CC IsoId=P34082-1; Sequence=Displayed;
 CC Name=2; Synonyms=C; Phosphatidylinositol-linked;
 CC IsoId=P34082-2; Sequence=VSP_002508, VSP_002509;
 CC Name=3; Synonyms=B;
 CC IsoId=P34082-3; Sequence=VSP_002506, VSP_002507;
 CC -1- TISSUE SPECIFICITY: In embryos, both isoforms are initially
 CC expressed on the surface of the axons in the MPI pathway and later
 CC on several other longitudinal axon fascicles.
 CC -1- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
 CC -1- SIMILARITY: Contains 2 fibronectin type III domains.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (see <http://www.1sb-sib.ch/announce/>
 CC or send an email to license@1sb-sib.ch).
 CC -----
 CC EMBL, M77165; AAA28527.1; -
 CC EMBL, M77166; AAA28528.1; -
 CC EMBL, AL033125; CAA21825.1; -
 CC EMBL, AE003430; AAF45925.2; -
 CC EMBL, AE003430; AAN09119.1; -
 CC EMBL, AL033125; CAA21826.1; -
 CC PIR, A41054; A41054
 CC Flybase, FBgn000635; Pa62.
 CC GO, GO:0005886; C:Plasma membrane; IDA.
 CC GO, GO:0007156; P:homophilic cell adhesion; IDA.
 CC GO, GO:0007611; P:learning and/or memory; IMP.
 CC GO, GO:0016319; P:mushroom body development; IMP.
 CC GO, GO:0008038; P:neural cell recognition; IDA.
 CC GO, GO:0045473; P:response to ethanol (sensu insecta); NAS.
 CC InterPro, IPR008557; FN-III-like.
 CC InterPro, IPR003961; FN-III.
 CC InterPro, IPR007110; IG-like.
 CC InterPro, IPR003598; IG_c2.
 CC Pfam, PF00047; fn3; 2.
 CC Pfam, PF00047; fn3; 5.
 CC SMART, SM00408; IG2; 2.
 CC SMART, SM00408; IG2; 3.
 CC PROSITE, PS50835; IG_LIKE; 5.
 CC Cell adhesion; Glycoprotein; Repeat; Alternative splicing;
 CC Immunoglobulin domain; Transmembrane; GPI-anchor; Signal;
 CC Neurogenesis.
 KW CHAIN 1 28 POTENTIAL.
 FT 29 873 FASCICLIN II.
 FT 751 EXTRACELLULAR (POTENTIAL).
 FT TRANSMEM 752 769 POTENTIAL.
 FT DOMAIN 770 873 CYTOPLASMIC (POTENTIAL).
 FT DOMAIN 31 131 IG-LIKE C2-TYPE 1.
 FT DOMAIN 138 223 IG-LIKE C2-TYPE 2.
 FT DOMAIN 230 318 IG-LIKE C2-TYPE 3.
 FT DOMAIN 323 423 IG-LIKE C2-TYPE 4.
 FT DOMAIN 428 520 IG-LIKE C2-TYPE 5.
 FT DOMAIN 544 619 FIBRONECTIN TYPE-III 1.
 FT DOMAIN 648 705 FIBRONECTIN TYPE-III 2.
 FT DISULFID 159 166 POTENTIAL.
 FT DISULFID 207 207 POTENTIAL.
 FT DISULFID 251 302 POTENTIAL.
 FT DISULFID 343 407 POTENTIAL.
 FT DISULFID 451 504 POTENTIAL.
 FT CARBOHYD 74 74 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 250 250 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 330 330 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 448 448 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 458 458 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 576 576 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 737 773 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT VARSPLIC 737 773 DNPHTSGAPLAQLVIFTRLPMTLLILPPTHTA (in
 FT isoform 3).
 FT VARSPLIC 774 873 /FTid=VSP_002506.
 FT Missing (in isoform 3).
 FT VARSPLIC 774 873

FT VARSPLIC 738 811 /FTid=VSP_002507.
 FT IDIVARQVPSAAIGVIAIGVILLFPVVDLCITVH
 FT NGVATWCRKAKSPSEIDDAKSGGLVAVP -> ESDS
 FT ANNILGLTLYSAGNSGVGALHRLFTTTTATSTTIT
 FT SITATTTITLITATISITLISLVASMA (in isoform
 FT 2).
 FT /FTid=VSP_002508.
 FT Missing (in isoform 2).
 FT VARSPLIC 812 873 /FTid=VSP_002509.
 FT CONFLICT 804 804 S -> R (IN REF. 4; CAA21826).
 FT SEQUENCE 873 AA, 96926 MW, E48F0484CCE62AC9 CRC64;
 SQ
 Query Match 6.3%; Score 117; DB 1; Length 873;
 Best Local Similarity 22.5%; Pred. No. 0.03;
 Matches 69; Conservative 40; Mismatches 126; Indels 72; Gaps 14;
 QY 10 LGILLILTI-----FLVAEAGAAQPNNSIMLOTSKENHALASSLCMDKQITQVYS 62
 DB 46 VKKPLILTCRPVTPPEPSIVADLQMDNRRNTILPPNGRNPMPYTELPGES----- 98
 QY 63 KYLAENVNFWPKMA-----TNAYLCCEPIALRNLIITWEILLRGQ-PSCTKAYR 112
 DB 99 --LALMTISLSVEMGCKYCTSYANTLELKGVIKTYALTNTNAPENQVPTLGQDV 156
 QY 113 KETNETKENTCTDERITWVRPD-----QNSDIQRPVAITHDGYRC--INVT 159
 DB 157 VMCEVYADPNPT---IDMLRNGDPTRTNDKYVQTNGLLRNVQESDEGIYTCRAVIE 213
 QY 160 PGNFRFGHLOLVTPPV-----TLFQNNRNVACVAGKPAAGISWTFEG---DC 209
 DB 214 TSELLERTIRVAFVFOPELISLPTMLEAVEGKPPAANCTA-RGKVPBELSWRDATQNV 272
 QY 210 ATKQEXWSN---GYTVKSTCHMEVNVSTVCHVSHLTG-----NKSILYEL 254
 DB 273 ATDRQVNPQGVLTIVSSVSQ---DDYGTICTAKNRGVVDQKTLNVLRPQIV-BL 328
 QY 255 LVPYGA 261
 DB 329 YNVTGAR 335
 RESULT 12
 NCAL_CHICK STANDARD; PRT; 1091 AA.
 ID NCAL_CHICK
 AC P13590; Q90918; Q90919;
 DT 01-JAN-1990 (Rel. 13, Created)
 DT 15-JUL-1998 (Rel. 36, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE Neural cell adhesion molecule 1, 180 kDa isoform precursor (N-CAM
 DE 180).
 OS Gallus gallus (Chicken).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;
 OC Gallus.
 OC NCBI_TaxID=9031;
 RN [1]
 RP SEQUENCE OF 1-175 FROM N.A., AND PARTIAL SEQUENCE.
 RX MEDLINE=67206150; PubMed=3576199;
 RA Cunningham B.A., Hemperly J.J., Murray B.A., Prediger E.A.,
 RA Brackenbury R., Edelman G.M.;
 RT "Neural cell adhesion molecule: structure, immunoglobulin-like
 RT domains, cell surface modulation, and alternative RNA splicing."
 RL Science 236:799-806 (1987).
 RN [2]
 RP SEQUENCE OF 128-1091 FROM N.A., AND PARTIAL SEQUENCE.
 RX MEDLINE=6206089; PubMed=3458261;
 RA Hemperly J.J., Murray B.A., Edelman G.M., Cunningham B.A.;
 RA "Sequence of a cDNA clone encoding the polysialic acid-rich and
 RT cytoplasmic domains of the neural cell adhesion molecule N-CAM."
 RL Proc. Natl. Acad. Sci. U.S.A. 83:3037-3041 (1986).
 RN [3]
 RP SEQUENCE FROM N.A. (ISOFORM D).
 RX MEDLINE=67092340; PubMed=3467341;

DR GO; GO:0005615; C:extracellular space; TAS.
 DR GO; GO:0016021; C:integral to membrane; TAS.
 DR GO; GO:0004872; F:receptor activity; TAS.
 DR GO; GO:0007125; P:invasive growth; TAS.
 DR InterPro; IPRO07110; IG-like.
 DR InterPro; IPRO03596; IG_v.
 DR Pfam; PF00047; IG_3.
 DR SMART; SM00406; IGV; 1.
 DR PROSITE; PS00835; IG_LIKE; 3.
 DR Immunoglobulin domain; Receptor; Transmembrane; Glycoprotein; Signal;
 Repeat; Antigen; Alternative splicing; Polymorphism.
 FT CHAIN 1 417
 FT SIGNAL 20
 FT DOMAIN 21 343
 FT TRANSMEM 344 367
 FT DOMAIN 368 417
 FT DOMAIN 24 139
 FT DOMAIN 145 237
 FT DOMAIN 244 338
 FT DISULFID 49 123
 FT DISULFID 166 221
 FT DISULFID 266 312
 FT CARBOHYD 105 105
 FT CARBOHYD 120 120
 FT CARBOHYD 188 188
 FT CARBOHYD 218 218
 FT CARBOHYD 237 237
 FT CARBOHYD 276 276
 FT CARBOHYD 307 307
 FT CARBOHYD 313 313
 FT VARSPLIC 340 384
 FT VARSPLIC 331 331
 FT VARSPLIC 332 384
 FT VARSPLIC 385 392
 FT VARSPLIC 393 417
 FT VARIANT 67 67
 FT VARIANT 340 340
 FT SEQUENCE 417 AA; 45302 MW; D15C012CE853169B CRC64;
 Query Match 6.3%; Score 115.5; DB 1; Length 417;
 Best Local Similarity 24.4%; Pred. No. 0.018; Indels 69; Gaps 11;
 Matches 59; Conservative 32; Mismatches 82;
 QY 71 SWPVKATNAVLCPPALRNLI-----TW 98
 DB 8 AMLLLVALLVLSWPPGTGDVVQAPTVQPGFAGDSVLLPCYGVNNVTHVSLTW- 66
 QY 99 IILRGSPCTKAYRKET-----NETKETCTDERITWSPSPNSLOIRPAVITHDGY 153
 DB 67 --ARHSGSGMAVFTHTQGPVSSESRLEFVAARLAEAR--NASLRFGLRVDEGRY 121
 QY 154 RCIIMVT-PDGNFRGYHLYLTPE-----VTLFQNNKRTAVCKAVAGKAQISWIP 205
 DB 122 TCFVTFPPQGSVDIMLRVLAKEQNTAEVQKQLTGEVPMARCVSTGRPAQITWHS 181
 QY 206 E--GDCAIKR-EVWSNGTIVKSTCMWEYHNS-----VYTCYVSH-----LTGKS 249
 DB 182 DLAGMPTSGVPGFSLGTIVTSL--WILVPSQVDGKNVTCVHESEPEKQLLHVNLT 239
 QY 250 LY 251
 DB 240 VY 241

ID CAML_HUMAN STANDARD; RPT; 1257 AA.
 AC P32004; Q8TA87;
 DT 01-JUL-1993 (Rel. 26, Created)
 DT 01-OCT-1996 (Rel. 34, Last sequence update)
 DT 15-MAR-2004 (Rel. 43, Last annotation update)
 DE Neutral cell adhesion molecule LI precursor (N-CAM LI) (CD171 antigen).
 GN L1CAM OR CAML1 OR MIC5.
 OS Homo sapiens (human).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
 OC NCBI_TaxID=9606;
 RX MEDLINE=92031698; PubMed=1932117;
 RA Kobayashi M., Miura M., Asou H., Uyemura K.;
 RT "Molecular cloning of cell adhesion molecule LI from human nervous
 RT tissue: a comparison of the primary sequences of LI molecules of
 RT different origin."
 RL Biochim. Biophys. Acta 1090:238-240(1991).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=92120663; PubMed=1769655;
 RA Hlaiv M.L., Lemmon V.;
 RT "Molecular structure and functional testing of human L1CAM: an
 RT interspecies comparison."
 RL Genomics 11:416-423(1991).
 RN [3]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=92329299; PubMed=1627459;
 RA Reid R.A., Hemmery U.J.;
 RT "Variants of human LI cell adhesion molecule arise through alternate
 RT splicing of RNA."
 RL J. Mol. Neurosci. 3:127-135(1992).
 RN [4]
 RP SEQUENCE FROM N.A.
 RX Rosenthal A., Coutelle O., Drescher B.;
 RT Submitted (Apr-1994) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97432815; PubMed=9286695;
 RA Brenner V., Nyakatura G., Rosenthal A., Platzner M.;
 RT "Genomic organization of two novel genes on human Xq28: compact head
 RT to head arrangement of IDH gamma and TRAP delta is conserved in rat
 RT and mouse."
 RL Genomics 44:8-14(1997).
 RN [6]
 RP SEQUENCE FROM N.A. AND ALTERNATIVE SPLICING.
 RX MEDLINE=98147998; PubMed=9479034;
 RA Coutelle O., Nyakatura G., Taudien S., Elgar G., Brenner S.,
 RA Platzner M., Drescher B., Joutel M., Kenwright S., Rosenthal A.;
 RT "The neutral cell adhesion molecule LI: genomic organization and
 RT differential splicing is conserved between man and the pufferfish
 RT Fugu."
 RL Gene 208:7-15(1998).
 RN [7]
 RP SEQUENCE OF 20-36.
 RX MEDLINE=86298875; PubMed=3136168;
 RA Wolff J.M., Frank R., Mujoo K., Spito R.C., Reisfeld R.A.,
 RA Rathjen F.G.;
 RT "A human brain glycoprotein related to the mouse cell adhesion
 RT molecule LI."
 RL J. Biol. Chem. 263:11943-11947(1988).
 RN [8]
 RP SEQUENCE OF 332-371 FROM N.A.
 RX MEDLINE=90353957; PubMed=2387585;
 RA Djabali M., Mattei M.-G., Nguyen C., Roux D., Demengeot J.,
 RA Denizot F., Moos X., Schachner M., Goriidis C., Jordan B.R.;
 RT "The gene encoding LI, a neutral adhesion molecule of the
 RT immunoglobulin family, is located on the X chromosome in mouse and
 RT man."
 RL Genomics 7:587-593(1990).
 RN [9]

```

RP SEQUENCE OF 353-1176 FROM N.A.
RC TISSUE=Fetal brain;
RX MEDLINE=92020233; PubMed=1923824;
RA "Rosenblatt A., Mackinnon R.N., Jones D.S.C.;
RT "PCR walking from microdissection clone M54 identifies three exons
RT from the human gene for the neural cell adhesion molecule L1
RT (CAM-L1).";
RL Nucleic Acids Res. 19:5395-5401(1991).
RN [10]
RP SEQUENCE OF 809-1257 FROM N.A.
RC TISSUE=Pancreas;
RX MEDLINE=22388257; PubMed=12477932;
RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
RA Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
RA Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J., Heish F.,
RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
RA Stepieton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
RA Brownstein W.J., Uscin F.B., Tomilsky S., Carninci P., Prange C.,
RA Rana S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mulhaly S.J.,
RA Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H.,
RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
RA Villalobon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
RA Fahey J., Helton E., Kettner M., Madan A., Rodriguez S., Sanchez A.,
RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
RA Blakeley R.W., Touchman J.W., Green E.D., Dickson M.C.,
RA Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M.,
RA Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smalins D.E.,
RA Scherch A., Schein J.E., Jones S.J.M., Marra M.A.;
RT "Generation and initial analysis of more than 15,000 full-length
RT human and mouse cDNA sequences.";
RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
RN [11]
RP SEQUENCE OF 1030-1257 FROM N.A.
RX MEDLINE=91132183; PubMed=1993895;
RA Harper J.R., Prince J.T., Healy P.A., Stuart J.K., Nauman S.J.,
RA Stalcup W.B.;
RT "Isolation and sequence of partial cDNA clones of human L1: homology
RT of human and rodent L1 in the cytoplasmic region.";
RL J. Neurochem. 56:797-804(1991).
RN [12]
RP VARIANT HSAS TYR-264.
RX MEDLINE=94004956; PubMed=8401576;
RA Joutel M., Rostalet A., Macfarlane J., Kenwick S., Donnai D.;
RT "A missense mutation confirms the L1 defect in X-linked hydrocephalus
RT (HSAS).";
RL Nat. Genet. 4:331-331(1993).
RN [13]
RP VARIANT HSAS/MASA LEU-1194.
RX MEDLINE=95187172; PubMed=7681431;
RA Fransen E., Schrandt-Stumpel C., Vits L., Coucke P., van Camp G.,
RA Willems P.J.;
RT "X-linked hydrocephalus and MASA syndrome present in one family are
RT due to a single missense mutation in exon 26 of the L1CAM gene.";
RL Hum. Mol. Genet. 3:2255-2256(1994).
RN [14]
RP VARIANT HSAS GLN-184 AND ARG-452 AND VARIANT MASA GLN-210.
RX MEDLINE=95004608; PubMed=7920659;
RA Joutel M., Rostalet A., Armstrong G., Macfarlane J., Stevenson R.,
RA Patterson J., Mentrath A., Ionescu V., Temple K., Kenwick S.;
RT "X-linked spastic paraplegia (SPGL), MASA syndrome and X-linked
RT hydrocephalus result from mutations in the L1 gene.";
RL Nat. Genet. 7:402-407(1994).
RN [15]
RP VARIANT MASA GLN-210 AND ASN-598.
RX MEDLINE=95004609; PubMed=7920660;
RA Vits L., van Camp G., Coucke P., Fransen E., de Boule K.,
RA Reyniers E., Korn B., Poustka A., Wilson G., Schrandt-Stumpel C.,
RA Winter R.M., Schwartz C., Willems P.J.;
RT "MASA syndrome is due to mutations in the neural cell adhesion gene
RT L1CAM.";
RL Nat. Genet. 7:408-413(1994).
RN [16]
RP VARIANT HSAS/MASA SER-9; SER-121; LYS-309; PHE-768; LEU-941 AND
RP CYS-1070.
RX MEDLINE=95282776; PubMed=7762552;
RA Joutel M., Moncla A., Patterson J., McKewon C., Fryer A., Carpenter N.,
RA Holmberg E., Madelin C., Kenwick S.;
RT "New domains of neural cell-adhesion molecule L1 implicated in
RT X-linked hydrocephalus and MASA syndrome.";
RL Am. J. Hum. Genet. 56:1304-1314(1995).
RN [17]
RP VARIANT HSAS/MASA GLN-184; GLN-210; TYR-264; ARG-452; ASN-598 AND
RP LEU-1194.
RX MEDLINE=96153146; PubMed=8556302;
RA Fransen E., Lemmon V., van Camp G., Vits L., Coucke P., Willems P.J.;
RT "CRASH syndrome: clinical spectrum of corpus callosum hypoplasia,
RT retardation, adducted thumbs, spastic paraparesis and hydrocephalus
RT due to mutations in one single gene, L1.";
RL Eur. J. Hum. Genet. 3:273-284(1995).
RN [18]
RP ERRATUM.
RA Fransen E., Lemmon V., van Camp G., Vits L., Coucke P., Willems P.J.;
RL Eur. J. Hum. Genet. 4:126-126(1996).
RN [19]
RP VARIANT HSAS/MASA/SPG1 SER-179 AND ARG-370.
RX MEDLINE=96057511; PubMed=7562969;
RA Ruiz J.C., Cuppens H., Legius E., Fryns J.-P., Glover T., Marynen P.,
RA Cassiman J.-J.;
RT "Mutations in L1-CAM in two families with X linked complicated
RT spastic paraplegia, MASA syndrome, and HSAS.";
RL J. Med. Genet. 32:549-552(1995).
RN [20]
RP VARIANT HSAS CYS-194 AND LEU-240.
RX MEDLINE=97083370; PubMed=8929944;
RA Gu S.-M., Orth U., Veske A., Enders H., Kluender K., Schloesser M.,
RA Engel W., Schwinger E., Gal A.;
RT "Five novel mutations in the L1CAM gene in families with X linked
RT hydrocephalus.";
RL J. Med. Genet. 33:103-106(1996).
RN [21]
RP VARIANT HSAS GLN-184; 439-VAL--THR-443 DEL; CYS-784 AND
RP 936-LEU--LEU-948 DEL.
RX MEDLINE=97338664; PubMed=9195224;
RA Macfarlane J.R., Du J.-S., Peys M.E., Ramsden S., Donnai D.,
RA Charlton R., Garrett C., Tolmie J., Yates J.R.W., Berry C., Goudie D.,
RA Moncla A., Lunt P., Hodgson S., Joutel M., Kenwick S.;
RT "Nine novel L1 CAM mutations in families with X-linked
RT hydrocephalus.";
RL Hum. Mutat. 9:512-518(1997).
RN [22]
RP VARIANT HSAS/MASA ASP-691; ARG-698 AND PRO-935.
RX MEDLINE=98180721; PubMed=9521424;
RA Du Y.-Z., Srivastava A.K., Schwartz C.E.;
RT "Multiple exon screening using restriction endonuclease
RT fingerprinting (RPF): detection of six novel mutations in the L1 cell
RT adhesion molecule (L1CAM) gene.";
RN [23]
Query Match 6.2%; Score 115; DB 1; Length 1257;
Best Local Similarity 20.1%; Pred. No. 0.077;
Matches 64; Conservative 47; Mismatches 135; Indels 72; Gaps 11;
QY 77 ATNAVAVICCP-----IALRNLIITWEIIRGQSPCTAYARKETETKTNCT 124
DB 231 ATNSMDIKRPLIFPNSSSHVLAQGPVL--ECLAEGFPPTIKMLRPSGPMR---- 285
QY 125 DERITVSRPDQNSDQIRPVAITHDGYRCIMVTPDGNFHRGYLQV-----LVTPEV 178
DB 286 -DRVTY---GNHKKTLQLKVGEDDEGEYRCIAENSLGSRARAYVTVAPADYVJHKPS 341
QY 179 TLFQNKRRVAVCAVAGKRAQISV----IPSGDCAIKQVYNSNGVTVKSTCHVEVNV 234
DB 342 HLYGPEETKRDQCVQGRPOPEVTRINQIPVELAKDKYKILQRALLTSVQPSDITNV 401
QY 235 STVTCVSH--LTGNSKLYIELLPVGAKKSAKLYT-----PYITLITITIVGFITL 286

```

DB 402 TOCEARNHGLLANAYIVVQLPAKILTLADNOTNAVQSTAYLLCKAFAPVSYOWL 461
 QY 287 LKVNCRKRYKANKTESTVEEDEMOPASTY-----EONPLXD 326
 DB 462 -----DEGTTVLQDERFFPYANGTLGRDLQANDGRYFCLANDNNVTIM 509
 QY 327 TTNKVK-ASOALQSEVD 343
 DB 510 ANLKVKQADQITQGRST 527

RESULT 15
 NCAL RAT STANDARD, FRT, 858 AA.
 ID NCAL RAT
 AC P1356;
 DT 01-JAN-1990 (Rel. 13, Created)
 DT 01-JAN-1990 (Rel. 13, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE Neutral cell adhesion molecule 1, 140 kDa isoform precursor (N-CAM 140)
 DE (NCAM-140).
 GN NCAM1 OR NCAM.
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RX MEDLINE=86059265; PubMed=3680385;
 RA Small S.J., Shull G.E., Santoni M.-J., Akeson R.;
 RT Identification of a cDNA clone that contains the complete coding
 RT sequence for a 140-kD rat NCAM polypeptide."
 RL J. Cell Biol. 105:2335-2345(1987).
 RN [2]
 RP SEQUENCE OF 355-364 FROM N.A.
 RX MEDLINE=90166485; PubMed=2483093;
 RA Small S.J., Haines S.L., Akeson R.A.;
 RT Polypeptide variation in an N-CAM extracellular immunoglobulin-like
 RT fold is developmentally regulated through alternative splicing."
 RL Neuron 1:1007-1017(1988).
 CC -1- FUNCTION: This protein is a cell adhesion molecule involved in
 CC neuron-neuron adhesion, neurite fasciculation, outgrowth of
 CC neurites, etc.
 CC -1- SUBCELLULAR LOCATION: Type I membrane protein.
 CC -1- ALTERNATIVE PRODUCTS:
 CC Event=Alternative splicing; Named isoforms=1;
 CC Comment=A number of isoforms are produced;
 CC Name=1;
 CC IsoId=P1356-1; Sequence=Displayed;
 CC -1- SIMILARITY: Contains 5 immunoglobulin-like C2-type domains.
 CC -1- SIMILARITY: Contains 2 fibronectin type III domains.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation-
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 CC DR EMBL; X06564; CAA29809.1; -;
 DR EMBL; M32611; AAA41679.1; -;
 DR PIR; S00846; IJRTNC.
 DR PDB; 1EPF; 27-OCT-00.
 DR InterPro; IPR008957; FN_III-like.
 DR InterPro; IPR003961; FN_III.
 DR InterPro; IPR007110; Ig_1-like.
 DR InterPro; IPR003598; Ig_C2.
 DR Pfam; PF00041; fn3; 2.
 DR Pfam; PF00047; Ig; 5.
 DR SMART; SM00060; FN3; 2.
 DR SMART; SM00408; IGC2; 5.
 DR PROSITE; PS00835; IG_LIKE; 5.

KW Cell adhesion; Glycoprotein; Transmembrane; Repeat;
 KW Immunoglobulin domain; Alternative splicing; Signal; Heparin-binding;
 KW 3D-structure.
 FT STGNL 1 19
 FT CHAIN 20 858
 FT
 FT DOMAIN 20 721
 FT TRANSEM 722 739
 FT DOMAIN 740 858
 FT DOMAIN 20 111
 FT DOMAIN 116 205
 FT DOMAIN 212 302
 FT DOMAIN 309 414
 FT DOMAIN 417 502
 FT DOMAIN 514 615
 FT DOMAIN 616 712
 FT DOMAIN 152 156
 FT DOMAIN 161 165
 FT DISULFID 41 96
 FT DISULFID 139 189
 FT DISULFID 235 288
 FT DISULFID 330 396
 FT DISULFID 437 490
 FT CARBOHYD 222 222
 FT CARBOHYD 316 316
 FT CARBOHYD 348 348
 FT CARBOHYD 434 434
 FT CARBOHYD 460 460
 FT CARBOHYD 489 489
 SQ SEQUENCE 858 AA; 94658 MW; EAL0644E050F6 CRC64;

Query Match 6.2%; Score 114.5; DB 1; Length 858;
 Best Local Similarity 21.5%; Pred. No. 0.054;
 Matches 63; Conservative 39; Mismatches 106; Indels 85; Gaps 12;

QY 31 NNSLMQTSK-----ENHALASSLCMDKQTON-----YSKVLAEVNTSWP 73
 DB 171 NNYLQIRGIKKTDEGTGRCGRILARGEINFKIQVAVNPPTVQARQSTVATATNLGQS 230
 QY 74 VPKATNAVLCPPFALANLIIITWELLRQPSCTKAYRKETNETKETNCTDERITVSR 133
 DB 231 VTLVCA-----DGFPEPTMSWTGDEIEEEDDEKHP--- 266
 QY 134 PDNSDIQIRPVALTHDGYRCIWTDPGNFRCYHLQVLYPEVTLFQRNR----- 186
 DB 267 SDDSSELTIRVNDXNDAEAYCIAENKAGQDASHLKVPKPKRITVEVQTALEEQV 326
 QY 187 TAVCKAVAGKNAQISNIPESDCAKQOE--YMS-----NGTVYKSTCHMEVHNVT 236
 DB 327 TLVCEA-SGDLPISLITRTSRNISSEKXKSWTPKQETLDGHNVRSHA-----RVSS 380
 QY 237 VT-----CHVSHLGT--NKSLEYELLVPQAKKSAKLYPIYLLT 274
 DB 381 LTLKSIQVTDAGEYICTASNTIGQDSQSMYLEVQYAP-----XLQSPVAVYT 427

Search completed: May 7, 2004, 11:41:13
 Job time : 19 secs

GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.

OM protein - protein search, using sw model

Run on: May 7, 2004, 11:36:39 ; Search time 45 seconds
(without alignments)
2440.007 Million cell updates/sec

Title: US-10-009-445A-20

Perfect score: 1846
Sequence: 1 MLCFRTANLGLLILITFL.....NKVSAQALQSEVDTLHTL 348

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 1017041 seqs, 315518202 residues

Total number of hits satisfying chosen parameters: 1017041

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 45 summaries

Database : SPTREMBL.25.*
1: sp_archaea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_virus:*
16: sp_dactylap:*
17: sp_archaeap:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	651	35.3	270	11	Q8BTP3
2	635	34.6	270	11	Q8BTP3
3	188	10.2	202	11	Q8BTP3
4	188	10.2	202	11	Q8BTP3
5	131	7.1	1091	11	Q8BTP3
6	130.5	7.1	5636	4	Q96RW7
7	129	7.0	549	11	Q9JLB9
8	127.5	6.9	438	11	Q9JLB7
9	127	6.9	510	11	Q9JLB8
10	126	6.8	549	11	Q9JLB8
11	125.5	6.8	449	4	Q9UEI6
12	125.5	6.8	467	11	Q9JLV9
13	125.5	6.8	467	11	Q8C6F2
14	125.5	6.8	530	11	Q80XJ5
15	125	6.8	433	5	Q9V644
16	125	6.8	731	13	Q91150

17	124	6.7	523	11	Q8K2H7
18	123.5	6.7	605	11	Q921P2
19	123.5	6.7	838	11	Q8C4B2
20	123.5	6.7	838	11	Q8BQ96
21	122.5	6.6	316	11	Q7TPB4
22	122	6.6	335	13	Q9BWR4
23	122	6.6	335	13	Q9YGH1
24	121	6.6	335	13	Q9YGH1
25	120.5	6.5	524	11	Q921K7
26	120	6.5	1093	4	Q86XJ1
27	119	6.4	858	4	Q86XJ7
28	118	6.4	1094	4	Q8YB88
29	117	6.3	773	5	Q8TRSS
30	116.5	6.3	358	13	Q90490
31	116.5	6.3	838	13	Q90YV1
32	116	6.3	335	13	Q9YGV5
33	115.5	6.3	417	4	Q96BJ1
34	115.5	6.3	800	5	Q86LFF
35	115.5	6.3	801	5	Q86LFF
36	115.5	6.3	976	13	Q8YF85
37	115.5	6.3	976	13	Q8YF85
38	115	6.2	316	11	Q8VE98
39	115	6.2	534	4	Q86SE4
40	115	6.2	1255	4	Q723Z9
41	114	6.2	534	6	Q86ET2
42	114	6.2	846	13	Q57577
43	114	6.2	1100	6	Q57576
44	114	6.2	1255	6	Q7YQJ8
45	113.5	6.1	1248	6	Q9XJ41

ALIGNMENTS

RESULT 1	ID	Q8BTP3	PRELIMINARY	PRT	270 AA.
AC	Q8BTP3	01-MAR-2003 (TREMREL. 23, Created)			
DT	01-MAR-2003 (TREMREL. 23, Last sequence update)				
DT	01-OCT-2003 (TREMREL. 25, Last annotation update)				
DE	Similar to OX2 receptor.				
GN	F630003A1BRK.				
OS	Mus musculus (Mouse).				
CC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;				
CC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.				
OX	NCBI_TaxID=10090;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	STRAIN=NOD;				
RX	MEDLINE=22354683; PubMed=12466851;				
RA	The FANTOM Consortium,				
RA	The RIKEN Genome Exploration Research Group Phase I & II Team;				
RT	"Analysis of the mouse transcriptome based on functional annotation of				
RT	60,770 full-length cDNAs."				
RL	Nature 420:563-573(2002).				
DR	EMBL; AK089168; BAC40774.1;				
DR	MGI; MGI:2442797; F630003A1BRK.				
DR	InterPro; IPR003599; IG.				
DR	InterPro; IPR007110; IG-like.				
DR	SMART; SMO0409; IG; 1.				
DR	PROSITE; PS50835; IG LIKE; 2.				
DR	SEQUENCE 270 AA; 29528 MW; EFFIDBCOECG317A CRC64;				
QY	Query Match	35.3%; Score 651; DB 11; Length 270;			
QY	Best Local Similarity	48.8%; Pred. No. 2.3e-53;			
QY	Matches 142; Conservative 33; Mismatches 86; Indels 30; Gaps 4;				
QY	6 RTANGLITLITLVAEAGAPNNLSIMQTSKKNHALLSSLCMDKQITON-YSKV 64				
QY	6 RTPALTLITLITIV- 33				
QY	6 LAEVNTSWPVMAATNAVLCPPIALRNLIITWEIIRGDSCTKAYRKEINTEKINCT 124				

```

Db 40 LTVQVTTTSSVQIGTALACCFSEIPLTKAVLITWIKMDLPSCTLLYKVDI-KITIEISCL 98
125 DERITWVRSPDQNSDLQIRPAVITHDGYRCIMVTPDGNFHRGYHLQVLTPEVTLFQNR 184
99 DNRITWASTPDHSPDLQISAVTLQHEGYTCETVPEGNFGRVYDLQVLTPEVTLFPGK 158
185 NRTAVCKAVAGKPAQISWIPEDGCATKCEWNSGTWYKSCHEWNNVSTVCHVSHL 244
159 NRTAVCEAVAGKPAQISWIPDGCCTTSSHSNGTVVRSCTHWEQNNVSAVSCIVSHS 218
245 TGNKSLFIELNGSGSTTTTSLTLLTYKVVLLGILLHVGAFAPQKRVIR 269
219 TGNKSLFIELNGSGSTTTTSLTLLTYKVVLLGILLHVGAFAPQKRVIR 269

RESULT 2
ID 08BTN8 PRELIMINARY; PRT; 270 AA.
AC 08BTN8;
DT 01-MAR-2003 (TREMBlrel. 23, Created)
DT 01-MAR-2003 (TREMBlrel. 23, Last sequence update)
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
DE Similar to OX2 receptor.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=MOD;
RX MEDLINE=22354683; PubMed=12466851;
RA The FANTOM Consortium;
RA The Riken Genome Exploration Research Group Phase I & II Team;
RT Analysis of the mouse transcriptome based on functional annotation of
RT 60,770 full-length cDNAs."
RL Nature 420:563-573 (2002).
DR EMBL; AK089193; BAC40786.1;
DR MGI; MGI:2442797; F630003A1BR1K.
DR InterPro; IPR007110; IG-1like.
DR PROSITE; PS50835; IG_Like; 1.
SQ SEQUENCE 270 AA; 29581 MW; F381DBC62BF481F CRC64;

Query Match 34.6%; Score 639; DB 11; Length 270;
Best Local Similarity 48.5%; Pred. No. 3,1e-52;
Matches 141; Conservative 33; Mismatches 87; Indels 30; Gaps 4;

```

```

QY 6 RTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEQKQITON-YSKY 64
Db 6 RTALTLLILITFLV-----SGSRITDNGQIIONDSSP 39
QY 65 LAEVNTSWPKATNAVLCPPIALRNLIITWEIILRGQSPCTAYRKEINTEYENCT 124
Db 40 LTVQVTTTSSVQIGTALACCFSEIPLTKAVLITWIKMDLPSCTLLYKVDI-KITIEISCL 98
QY 125 DERITWVRSPDQNSDLQIRPAVITHDGYRCIMVTPDGNFHRGYHLQVLTPEVTLFQNR 184
Db 99 DNRITWASTPDHSPDLQISAVTLQHEGYTCETVPEGNFGRVYDLQVLTPEVTLFPGK 158
QY 185 NRTAVCKAVAGKPAQISWIPEDGCATKCEWNSGTWYKSCHEWNNVSTVCHVSHL 244
Db 159 NRTAVCEAVAGKPAQISWIPDGCCTTSSHSNGTVVRSCTHWEQNNVSAVSCIVSHS 218
QY 245 TGNKSLFIELNGSGSTTTTSLTLLTYKVVLLGILLHVGAFAPQKRVIR 269
Db 219 TGNKSLFIELNGSGSTTTTSLTLLTYKVVLLGILLHVGAFAPQKRVIR 269

RESULT 3
ID 09D642 PRELIMINARY; PRT; 202 AA.
AC 09D642;

```

```

DT 01-JUN-2001 (TREMBlrel. 17, Created)
DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
DE 47334011BR1K protein.
GN 483340919R1K OR 47334011BR1K.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]
RP SEQUENCE FROM N.A.
RC STRAIN=C57BL/6J; TISSUE=Skin;
RX MEDLINE=21085660; PubMed=11217851;
RA Kawai J., Shitagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
RA Arikawa T., Hara A., Fukunishi Y., Komoto H., Adachi J., Fukuda S.,
RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamataka I.,
RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
RA Fleischmann W., Gaasterland T., Giesi C., King B., Kochiwa H.,
RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
RA Schirni L.M., Stambli F., Suzuki R., Tomita M., Wagner L., Washio T.,
RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Baxev G.,
RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldi M.F.,
RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
RA Gustincich S., Hill D., Holmann M., Hume D.A., Kamiya M., Lee N.H.,
RA Lyons P., Marchionni L., Mashima J., Mazzarelli U., Mombaerts P.,
RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
RA Saeki H., Sato K., Schoenbach C., Seta T., Shibata Y., Storch K.-F.,
RA Suzuki H., Toyooka K., Wang K.H., Wetz C., Whitaker C., Wilming L.,
RA Wyshak-Boris A., Yoshida K., Hasegawa Y., Kawai H., Kohetsuki S.,
RA Hayashizaki Y.;
RT Functional annotation of a full-length mouse cDNA collection."
RL Nature 409:685-690 (2001).
DR EMBL; AK014637; BAB29480.1;
DR MGI; MGI:1921853; 483340919R1K.
DR InterPro; IPR007110; IG-1like.
SQ SEQUENCE 202 AA; 22804 MW; EAF3EBB70903A45B CRC64;

Query Match 10.2%; Score 188; DB 11; Length 202;
Best Local Similarity 27.4%; Pred. No. 1.3e-09;
Matches 55; Conservative 29; Mismatches 87; Indels 30; Gaps 4;

```

```

QY 6 RTANLGLLILITFLVAEAGAAQPNNSIMLQTSKENHALASSSLCMEQKQITONSKVL 65
Db 6 RTALTLLILITFLV-----PPDSFPSPDNIPDGVGVTME----- 56
QY 66 AEVNTSWPKATNAVLCPPIALRNLIITWEIILRGQSPCTAYRKEINTEYENCTD 125
Db 57 IEITPVSVOIGIKAQLFCHPSPSKETLRITWITPDWPSCLPYHAEQIISKICTE 116
QY 126 ERITWVRSPDQNSDLQIRPAVITHDGYRCIMVTPDGNFHRGYHLQVLTPEV----- 178
Db 117 RGTTRVRAHQSSDLPLPKSMALKHGDHYSRIETDIFERSISIQVGTISILPSLLSI 176
QY 179 -----TLFQNN 185
Db 177 LYVLAATVLLVGFAPQKRN 197

RESULT 4
ID 09D628 PRELIMINARY; PRT; 205 AA.
AC 09D628;
DT 01-JUN-2001 (TREMBlrel. 17, Created)
DT 01-JUN-2001 (TREMBlrel. 17, Last sequence update)
DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
DE 483340919R1K protein.
GN 483340919R1K.
OS Mus musculus (Mouse).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX NCBI_TaxID=10090;
RN [1]

```

RP SEQUENCE FROM N.A.
 RC STRAIN=C57BL/6J; TISSUE=Head;
 RX MEDLINE=21085660; PubMed=11217851;
 RA Kawai J., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishi Y.,
 RA Arakawa T., Hara A., Fukunishi Y., Kono H., Adachi J., Fukuda S.,
 RA Azawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamada S.,
 RA Saito T., Okazaki Y., Gotohori T., Bono H., Kasukawa T., Saito R.,
 RA Kadota K., Matsuda H.A., Ashburner M., Batilov S., Casavant T.,
 RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochiwa H.,
 RA Kuehl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
 RA Schiraldi L.M., Staahl F., Suzuki R., Tomita M., Wagner L., Washio T.,
 RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barsh G.,
 RA Blake J., Boffelli D., Bojunga N., Carinci P., de Bonaldo M.F.,
 RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,
 RA Gustinich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
 RA Lyons P., Marchionni L., Mashima Y., Mazzarelli U., Mondaerts P.,
 RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
 RA Sasaki H., Sato K., Schoenbach C., Seta T., Shibata Y., Storch K.-F.,
 RA Suzuki H., Toyooka K., Wang K.H., Welter C., Whitaker C., Wilming L.,
 RA Wyrshaw-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohlsauki S.,
 RA Hayashizaki Y.,
 RA Functional annotation of a full-length mouse cDNA collection."
 RL Nature 409:685-690(2001).
 DR EMBL: AK014671; BAB29497.1;
 DR MGI: 1921853; 4833409J19Rik.
 DR InterPro: IPR007110; Ig-like.
 SQ SEQUENCE 205 AA; 22874 MW; 7780C3DDC25B8709 CRC64;

Query Match 10.2%; Score 188; DB 11; Length 205;
 Best Local Similarity 27.4%; Pred. No. 1,3e-09;
 Matches 55; Conservative 29; Mismatches 87; Indels 30; Gaps 4;

QY 6 RTANGLILITLITFLVAEAGAPNNISIMLQTSKENHALLASSLCMDKQITQNYSKVL 65
 DB 6 RTALMLILITITLVPSSCSYKREBI---PPDPSFPDDIIPFDGVTME----- 56
 QY 66 AEVNTSWPKATNAVALCCPIALRNLIITWIIILRGQPSCTAYRKETNETENCTD 125
 DB 57 IEIITPVQIGIKQKQIFCHPSKEATRIWETTPRPWPCRLPYAEILQOISKKICTE 116
 QY 126 ERIWVSPPDNQSDQIRPAVITHDGYRCIMVTPDGFHGHYLOVLVPEV----- 178
 DB 117 RGTIVPAHQSSDLPKSMALKHGHSKRIETITDGLFGRHSIQVPGTISILPSLST 176
 QY 179 -----TLFQNRN 185
 DB 177 LYVKLAVTVLVGFAFQKRN 197

RESULT 5
 ID P70193 PRELIMINARY; PRT; 1091 AA.
 AC P70193;
 DT 01-FEB-1997 (TREMBLrel. 02, Created)
 DT 01-FEB-1997 (TREMBLrel. 02, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Membrane glycoprotein.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=96394313; PubMed=8798419;
 RX Suzuki Y., Sato N., Toyama M., Manaka A., Takegi T.,
 RT "CDNA cloning of a novel membrane glycoprotein that is expressed
 specifically in glial cells in the mouse brain LIG-1: A protein with
 RT leucine-rich repeats and immunoglobulin-like domains.";
 RL J. Biol. Chem. 271:22522-22527(1996).
 DR EMBL: D78572; BAA11416.1;
 DR PIR: A58532; A58532.
 DR HSSP; P56276; ITLK.

DR MGI: 107935; Lr191.
 DR InterPro: IPR007110; Ig-like.
 DR InterPro: IPR003598; Ig_c2.
 DR InterPro: IPR001611; LRR.
 DR InterPro: IPR000483; LRR_Cterm.
 DR InterPro: IPR000372; LRR_Nterm.
 DR InterPro: IPR003591; LRR_Typ.
 DR Pfam: PF00047; Ig_3.
 DR Pfam: PF00560; LRR_14.
 DR Pfam: PF01463; LRRCT_1.
 DR Pfam: PF01462; LRRNT_1.
 DR PRINTS: PR00019; LEUCICRPT.
 DR SMART: SM00408; IGC2_3.
 DR SMART: SM00082; LRRCT_1.
 DR SMART: SM00013; LRRNT_1.
 DR SMART: SM00369; LRR_Typ_4.
 DR PROSITE: PS00835; Ig_Like_3.
 KW Immunoglobulin domain.
 SQ SEQUENCE 1091 AA; 119283 MW; A13D0866CE4C203D CRC64;

Query Match 7.1%; Score 131; DB 11; Length 1091;
 Best Local Similarity 23.4%; Pred. No. 0.0029;
 Matches 64; Conservative 37; Mismatches 119; Indels 54; Gaps 14;

QY 87 IALRNLIITWIIILRGQPSCTAYRKETNETENCTD-----ERITVSPDNQSDIQ 141
 DB 610 IAIRGTATRLCAATGHPNQAIAWQKGG-----IDFPAARBRMTV-WPDDIV-FF 660
 QY 142 IRPAVITHDGYRCIMVTPDGFHGHYLOVLVTP-----EVLTFQNRNT 187
 DB 661 ITDVKIDMGVYSCTRQNSAGSVSANATITVLETSLAVPLEDRVTVGETVAFQ----- 715
 QY 188 AVCKAVAGKPAQGISWPEGD--CATKQEWNGT--VTVSTCHMEVAVNSTVTCVSH 243
 DB 716 --CKA-TGSPRTITLTKGRLSLTERHFTPGNQLVAVQVM--IDDAGRYCTEMSN 769
 QY 244 LGNKSILY--IILPVPKAKSKAKLYPIIILITITVGTTLTKVNGCRK---YKL 297
 DB 770 PLGTERAHSQSLTLPFGGRKGGTIVGITLAVGSIIVLTLVGLIIVQTKKSESYV 829
 QY 298 NKTESTPVVEDEMOFYASTEKNNPLVDTNKV 331
 DB 830 TNTDET-IVPDP---VPSYLSQGLSDRQRTV 858

RESULT 6
 ID Q96RW7 PRELIMINARY; PRT; 5636 AA.
 AC Q96RW7;
 DT 01-DEC-2001 (TREMBLrel. 19, Created)
 DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Hemocentin.
 OS Homo sapiens (human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Trent J.,
 RT "Human hemocentin gene",
 RL Submitted (JUN-1999) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AF156100; AAK68690.1;
 DR GO: GO:0005727; C:extrachromosomal circular DNA; IEA.
 DR GO: GO:0005509; F:calcium ion binding; IEA.
 DR GO: GO:0004197; F:cysteine-type endopeptidase activity; IEA.
 DR GO: GO:0006508; P:proteolysis and peptidolysis; IEA.
 DR InterPro: IPR000152; Asx_hydroxyl_S.
 DR InterPro: IPR000875; Cecropin.
 DR InterPro: IPR001434; DUF11.
 DR InterPro: IPR001881; EGF Ca.
 DR InterPro: IPR006209; EGF_Like.
 DR InterPro: IPR009017; GFP_Like.

DR InterPro: IPR007110; Ig-like.
 DR InterPro: IPR003538; Ig_C2.
 DR InterPro: IPR000169; SH3Pc_acsite.
 DR InterPro: IPR000884; TSP1.
 DR InterPro: IPR002035; VWF_A.
 DR Pfam: PF00008; EGF_5.
 DR Pfam: PF00047; Ig_44.
 DR Pfam: PF00090; TSP_1; 6.
 DR SMART: SM00179; EGF_CA; 7.
 DR SMART: SM00408; TSP2; 43.
 DR SMART: SM00209; TSP1; 6.
 DR SMART: SM00327; VWA; 1.
 DR TIGRFAMs: TIGR01451; B ant repeat; 9.
 DR PROSITE: PS00010; ASX HYDROXYL; 5.
 DR PROSITE: PS00268; CECROPIN; 1.
 DR PROSITE: PS01187; EGF_CA; 8.
 DR PROSITE: PS01187; EGF_CA; 8.
 DR PROSITE: PS00835; IG_LIKE; 44.
 DR PROSITE: PS00639; THIOI_PROTEASE_HIS; 1.
 DR PROSITE: PS50092; TSP; 5.
 DR EGF-like domain; Immunoglobulin domain.
 KM EGF-like domain; Immunoglobulin domain.
 SQ SEQUENCE 5636 AA; 613660 MW; F000B319CED7B5C CRC64;

Query Match 7.1%; Score 130.5; DB 4; Length 5636;
 Best Local Similarity 21.2%; Pred. No. 0.026;
 Matches 89; Conservative 55; Mismatches 142; Indels 133; Gaps 19;

9 NIGLILITFLVAEAGAAQPP-----NNSL-----MLQTSKENHAL 45
 2396 NISVERKNSVSLCEASGIFLPSTWFKDGPVSLNSVRLISGGRLMQLMTME---- 2451
 QY 46 ASSSLCMEDEKQITONTSKVLAENVTSFVPMATNAVLCPPIALRNLIITTEILLRGP 105
 DB 2452 -----DAQGYTCVVRNNAEGER-----KIFGLSVLPVPHIVGENTL---EDVVKKEQ 2496
 QY 106 SCTKAVRKETNETKCTNCTDERITW--VSRPDNSD-----LQIRPAITHDGY 153
 DB 2497 SVLTCEVTGNPPE-----ITWKKDQPLQEDBAHHIISGRLQITNVQVHTGRY 2549
 QY 154 RCIWTPDGNFHRGHLQVLTVP-----EVLFPQNRNTAVCAKAAVAPAOI 201
 DB 2550 TCLASSPAGHKSRFSFLNFWSPITAGVSDGNDPEVTVILNPSLVEEAYS--YPAII 2608
 QY 202 SWIPEDCATKQKQWNGTJTV-----KSTCWEMHNVSTYCHVSHLTGKSLYIEL 255
 DB 2609 TWKDKG--PPE--SKRNIRILPGRTLOILNAGDNRGRISCAVINAEMIKAYEV- 2662
 QY 256 PVEGAKSAALYIPYIILITLITIVGFIW-----LKYNG-----CRKYLKMTKE 301
 DB 2663 -----KVYIPPIINK-----GDLWGPGLSPREVKIKVNNLTLECAVYAI---P 2703
 QY 302 STEVVEDEMOFYASTEKKNPLVDITNKYKASQ-----ALQGEVDTDLH 346
 DB 2704 SASLSWYKQGPILKSDDHVIAANGHTLQIKKAQISDTGRYTCVASNIAGEDELDPVN 2762

RESULT 7
 Q9JUB9 PRELIMINARY; PRT; 549 AA.

AC Q9JUB9
 DT 01-OCT-2000 (TREMblrel. 15, Created)
 DT 01-OCT-2000 (TREMblrel. 15, last sequence update)
 DT 01-OCT-2003 (TREMblrel. 25, last annotation update)
 DE Cell adhesion molecule nectin-3 alpha.
 GN PYR13.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OC NCBI_TaxID=10090;
 RN [1]
 RP MEDLINE=20209403; PubMed=10744716;
 RX Satoh-Horikawa K., Nakanishi H., Takahashi K., Mayahara M.,

RA Tachibana K., Mizoguchi A., Takai Y.;
 RT "Nectin-3: a new member of immunoglobulin-like cell adhesion molecules
 RT that shows homophilic and heterophilic cell-cell adhesion
 RT activities.";
 RL J. Biol. Chem. 275:10291-10299 (2000).
 DR EMBL: AF195833; AAF63685.1; -.
 DR MGD; MGI:1930171; Pvr13.
 DR GO; GO:0005913; C:cell-cell adhesion junction; IDA.
 DR GO; GO:0005194; F:cell adhesion molecule activity; IDA.
 DR GO; GO:0005515; F:protein binding; IPT.
 DR GO; GO:0007155; P:cell adhesion; IDA.
 DR InterPro: IPR003539; Ig.
 DR InterPro: IPR007110; Ig-like.
 DR Pfam: PF00047; Ig_2.
 DR SMART: SM00409; Ig_1.
 DR PROSITE: PS50835; IG_LIKE; 3.
 SQ SEQUENCE 549 AA; 60583 MW; 5492C9ABB472F185 CRC64;

Query Match 7.0%; Score 129; DB 11; Length 549;
 Best Local Similarity 20.2%; Pred. No. 0.0018;
 Matches 99; Conservative 44; Mismatches 136; Indels 210; Gaps 21;

1 MLCFWRANIGLLITFLVAEAGAAQPPNSLMLQTSKENHALASSLCMEDEKQIT-- 58
 DB 29 LILPAPTPPPLLLILFLFLSLCG-----ALAGSLIV--EPHYTAV 69
 QY 59 --QNYV--KVLAEVNTSPVKAATNAVLCPPIALRNLIITTEILLRGPSTKAYKET 115
 DB 70 WGRVSLKCLIEVN-----ETIQISWEKI--HGKSTQVAVAHHPQ 108
 QY 116 NETKETNCTDERITWVSRPDNSDLOIRPAITHDGYRCIMYT--PDGNFHRGHLQVLT 174
 DB 109 YGFSVQGDYQGRVLFKNYSLNDATITLMNIGFSDGKRTKAVTFPLGNAGSSTTVLV 168
 QY 175 TPEVTLFQ-----NNRRTAVCAKAAVAPAOISWIBEGD----- 208
 DB 169 EPTVSLIKGPDLSDGNENVAACVAATGKPAQIDW--EGDLGEMESSTSPNETAT 226
 QY 209 -----CATQO-----EY----- 215
 DB 227 IVSQYKLFPRFARGRRITCVVHPALEKDIRSFILIDIPABEVSTYGDGMFVVRKG 286
 QY 216 -----WSNGTYVASTCMEVH-----NVSTV--TCHVSHLTG 246
 DB 287 VNLKNADANPPPKSVWSRLDQWPDGLASDVLTHF--VHPLTVNYSGVYCVKVSILG 345
 QY 247 NKS---LYTELPV-----PG-----AKSAKLYIPYIIL-----TI 275
 DB 346 QRSQKVIYISDPTTTLQPTVQWSSPADVDIATEHKKLPPPLSTLATLKDDITGIT 405
 QY 276 IITIVGFIWMLKVN---GCRKYK-----LNKTESPVVEDEMOF 313
 DB 406 IASVVGALPLVLYVLSIAGVFCYARRRTFRGDYFAKNIPIPSDMQKSGQIDVLHQDELDS 465
 QY 314 YASTEKNN 322
 DB 466 YPDSVKKEN 474

RESULT 8
 Q9JUB7 PRELIMINARY; PRT; 438 AA.

AC Q9JUB7
 DT 01-OCT-2000 (TREMblrel. 15, Created)
 DT 01-OCT-2000 (TREMblrel. 15, last sequence update)
 DT 01-OCT-2003 (TREMblrel. 25, last annotation update)
 DE Cell adhesion molecule nectin-3 gamma.
 GN PYR13.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 OC NCBI_TaxID=10090;
 RN [1]

RP SEQUENCE FROM N.A.
 RX MEDLINE=20209403; PubMed=10744716;
 RA Satcho-Horikawa K., Nakamishi H., Takahashi K., Miyahara M.,
 RA Tachibana K., Mizoguchi A., Takai Y.,
 RT "Nectin-3: a new member of immunoglobulin-like cell adhesion molecules
 RT that shows homophilic and heterophilic cell-cell adhesion
 RT activities.";
 RL J. Biol. Chem. 275:10291-10299(2000).
 DR EMBL; AF195835; AAF63686.1; -.
 DR MGI; MGI:1930171; Pvr13.
 DR GO; GO:0005913; C:cell-cell adherens junction; IDA.
 DR GO; GO:0005194; F:cell adhesion molecule activity; IDA.
 DR GO; GO:0005515; F:protein binding; IPT.
 DR GO; GO:0007155; P:cell adhesion; IDA.
 DR InterPro; IPR003599; IG.
 DR InterPro; IPR007110; IG-like.
 DR Pfam; PF00047; IG_1.
 DR SMART; SM00409; IG_1.
 DR PROSITE; PS00835; IG_LIKE; 3.
 DR PROSITE; PS00835; IG_LIKE; 3.
 SQ SEQUENCE 438 AA; 47261 MW; 2A0A4416E5B02FEF CRC64;
 Query Match 6.9%; Score 127.5; DB 11; Length 438;
 Best Local Similarity 21.3%; Pred. No. 0.0019;
 Matches 98; Conservative 44; Mismatches 136; Indels 183; Gaps 21;
 QY 1 MLCPEWTANLGLLITFLVAEAGAAQPNNSLMLQTSKENHALLASSLCMDKQIT-- 58
 DB 29 LLLPAPTPPPLLLIPLILFSLRGC-----ALAGSIIV--EPHVTAV 69
 QY 59 --QNVS-KYLAENVNTPVMAKATNAVLCPPALANLIIITWEIILRGQPSCTKAYKET 115
 DB 70 WGNVSLKCLIEVN-----ETIQISWEKI-HGKSTQTVAAVHPQ 108
 QY 116 NERKENCTDERITWVSRPDQNSDLQIRPAITHDGYRCIMWT-PDGNFHHGYHLOVY 174
 DB 109 YGFSVQGYQGRVLEFNYSLNDATTILNIGSDSGKIKCAVTFPLGNAOSTTVALV 168
 QY 175 TPEVTLFQ-----NRRNTAVCKAVAKPAQISWIEGDC----- 208
 DB 169 EPTVSLIKGPDLLDGNFTVAACVATGKPAQIDW--EGDLGEMESSTTSFPMETAT 226
 QY 209 -----CATKQ-----EX----- 215
 DB 227 IVSYQYKLPPTPRFARGRITCVKHPALEKDIRYSFILDIOYAPEVSVTGYDNWVGRKG 286
 QY 216 -----MSGTVYKSTCHWEH-----NVTV-TCHVSHLTG 246
 DB 287 VNLKCNADANPPPEKSVWSRLDQMPDGLASDNTLHF-VHPLTVNYSGVYVCKVSSSLG 345
 QY 247 NKS-----LYIELLP-----VPGAKKSANKLYPIYIILITIIITVFIWLLKVNCGRK 294
 DB 346 QNSDQKVIYISDIPFLTGSSIAVAGVGA-----VLALFIIIVFTV-LTPPRKKRP 397
 QY 295 YLANTESTPVEEDEMOPVASYTEK--NNPIYDTTNKYA 333
 DB 398 SYLDKVIDLPPTH---KPPVYERIRIPSLDKDLGQVRA 434
 RESULT 9
 Q9JUB8 PRELIMINARY; PRT; 510 AA.
 ID Q9JUB8
 AC Q9JUB8;
 DT 01-OCT-2000 (TREMBLrel. 15, Created)
 DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE Cell adhesion molecule nectin-3 beta.
 GN PVR13.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.

RX MEDLINE=20209403; PubMed=10744716;
 RA Satcho-Horikawa K., Nakamishi H., Takahashi K., Miyahara M.,
 RA Tachibana K., Mizoguchi A., Takai Y.,
 RT "Nectin-3: a new member of immunoglobulin-like cell adhesion molecules
 RT that shows homophilic and heterophilic cell-cell adhesion
 RT activities.";
 RL J. Biol. Chem. 275:10291-10299(2000).
 DR EMBL; AF195834; AAF63686.1; -.
 DR MGI; MGI:1930171; Pvr13.
 DR GO; GO:0005913; C:cell-cell adherens junction; IDA.
 DR GO; GO:0005194; F:cell adhesion molecule activity; IDA.
 DR GO; GO:0005515; F:protein binding; IPT.
 DR GO; GO:0007155; P:cell adhesion; IDA.
 DR InterPro; IPR003599; IG.
 DR InterPro; IPR007110; IG-like.
 DR Pfam; PF00047; IG_1.
 DR SMART; SM00409; IG_1.
 DR PROSITE; PS00835; IG_LIKE; 3.
 DR PROSITE; PS00835; IG_LIKE; 3.
 SQ SEQUENCE 510 AA; 55811 MW; 45CE6E8F78454864 CRC64;
 Query Match 6.9%; Score 127; DB 11; Length 510;
 Best Local Similarity 24.2%; Pred. No. 0.0026;
 Matches 72; Conservative 36; Mismatches 114; Indels 76; Gaps 14;
 QY 1 MLCPEWTANLGLLITFLVAEAGAAQPNNSLMLQTSKENHALLASSLCMDKQIT-- 58
 DB 29 LLLPAPTPPPLLLIPLILFSLRGC-----ALAGSIIV--EPHVTAV 69
 QY 59 --QNVS-KYLAENVNTPVMAKATNAVLCPPALANLIIITWEIILRGQPSCTKAYKET 115
 DB 70 WGNVSLKCLIEVN-----ETIQISWEKI-HGKSTQTVAAVHPQ 108
 QY 116 NERKENCTDERITWVSRPDQNSDLQIRPAITHDGYRCIMWT-PDGNFHHGYHLOVY 174
 DB 109 YGFSVQGYQGRVLEFNYSLNDATTILNIGSDSGKIKCAVTFPLGNAOSTTVALV 168
 QY 175 TPEVTLFQ-----NRRNTAVCKAVAKPAQISWIEGDCATKQ--YMSGTVT 222
 DB 169 EPTVSLIKGPDLLDGNFTVAACVATGKPAQIDW--EGDLGEMESSTTSFPMETAT 226
 QY 223 VKSTCHWEHVN-----STVTCVSHLTGKSL-YIELLPVQAKKSANKLYPIYILT 274
 DB 227 IVS-QYKLPPTPRFARGRITCVKHPALEKDIRYSFILDIO-----YAPEVSVT 274
 RESULT 10
 Q9D006 PRELIMINARY; PRT; 549 AA.
 ID Q9D006
 AC Q9D006;
 DT 01-JUN-2001 (TREMBLrel. 17, Created)
 DT 01-JUN-2001 (TREMBLrel. 17, Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25, Last annotation update)
 DE 2610301B19RIK protein.
 GN PVR13 OR 2610301B19RIK.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 NCBI_TaxID=10090;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=CS7BL/6J; TISSUE=Embryo;
 RX MEDLINE=21085660; PubMed=11217851;
 RA Kawai U., Shinagawa A., Shibata K., Yoshino M., Itoh M., Ishii Y.,
 RA Aikawa T., Hara A., Fukunishi Y., Komio H., Adachi J., Fukuda S.,
 RA Aizawa K., Izawa M., Nishi K., Kiyosawa H., Kondo S., Yamataka I.,
 RA Saito T., Okazaki Y., Gojobori T., Bono H., Kasukawa T., Saito R.,
 RA Kadota K., Matsuda H.A., Ashburner M., Batalov S., Casavant T.,
 RA Fleischmann W., Gaasterland T., Gissi C., King B., Kochwa H.,
 RA Kuhl P., Lewis S., Matsuo Y., Nikaido I., Pesole G., Quackenbush J.,
 RA Schmitt L.M., Scuderi P., Suzuki R., Tomita M., Wagner L., Washio T.,
 RA Sakai K., Okido T., Furuno M., Aono H., Baldarelli R., Barin G.,
 RA Blake J., Boffelli D., Bojunga N., Carninci P., de Bonaldo M.F.,
 RA Brownstein M.J., Bult C., Fletcher C., Fujita M., Gariboldi M.,

RA Guestinich S., Hill D., Hofmann M., Hume D.A., Kamiya M., Lee N.H.,
 RA Lyons P., Marchionni L., Mashima J., Mazzarelli J., Nomberts P.,
 RA Nordone P., Ring B., Ringwald M., Rodriguez I., Sakamoto N.,
 RA Sasaki H., Sato K., Schoenbach C., Seya T., Shibata Y., Storch K.-F.,
 RA Suzuki H., Toyooka K., Wang K.H., Weitz C., Whiteaker C., Wilmink L.,
 RA Wymah-Boris A., Yoshida K., Hasegawa Y., Kawaji H., Kohsaki S.,
 RA Hayashitaki Y.,
 RA "Functional annotation of a full-length mouse cDNA collection",
 RT Nature 405:685-690(2001).
 DR EMBL; AK011949; BAB27933.1; -
 DR MGD; MGI:1930171; Pvr13.
 DR GO; GO:0005913; Cell-cell adhesion junction; IDA.
 DR GO; GO:0005194; F-cell adhesion molecule activity; IDA.
 DR GO; GO:0005515; F-protein binding; IPI.
 DR GO; GO:0007155; F-cell adhesion; IDA.
 DR InterPro; IPR003599; IG.
 DR InterPro; IPR007110; IG-like.
 DR Pfam; PF00047; Ig_2.
 DR SMART; SM00409; Ig_1.
 DR PROSITE; PS50835; IG LIKE; 3.
 SQ SEQUENCE 549 AA; 60703 MW; 32775CBE07319B32 CRC64;

Query Match 6.8%; Score 126; DB 11; Length 549;
 Best Local Similarity 24.4%; Pred. No. 0.0035;
 Matches 73; Conservative 38; Mismatches 110; Indels 78; Gaps 15;

QY 1 MLCPTATLGLLITITFLVABAGAPNNLSIMQSKENHALASSLCDEKQIT-- 58
 DB 29 LLLPAPTPPLLLPLPLPLSLC3-----ALNGSLIV-EHIVAV 69
 QY 59 --QNTS-KYLAENVTSWPKVAKATNAVLCPPIALNLIITWELLRGOSCTKAYRET 115
 DB 70 WGNVSLKLCLEVN-----ETITQISWEKI-HGKSTQVAVHHPQ 108
 QY 116 NRTKENCNCTDERITWVSRPDQNSDQIRPAVATHGQYVCIMVT-PDGNFHGHYLOVLT 174
 DB 109 YGFSVQDYGQVRLFNYSINDATITLHNIGFSDGSKYICKAVTPPLGAGSSTTVLV 168
 QY 175 TREVTLFQ-----NRRITAVCKAVAKPAQISWIPBDCATKOEY---WSNGTV 221
 DB 169 EPTVSLIKGPDSSIDGNEVAACVSTGKPAQIDW--EGDLDG-EREFSTISFLNETA 225
 QY 222 TVKSTCHWEVHNV-----STVTCVSHLTGKNSL-YTELLPVPKAKKAKYIPPIIILT 274
 DB 226 TVVS-QYELFPTFRARGRRITCVXHPALEKDIRYSFLTDIQ-----YAEVSVT 274

RESULT 11
 Q9UE16 PRELIMINARY; PRT; 449 AA.
 AC Q9UE16;
 DT 01-MAY-2000 (TREMBlrel. 13, Created)
 DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
 DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
 DE Polio virus related protein 2, alpha isoform (Fragment).
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 NC NCB1_TaxID=9606;
 RN [1]
 RE SEQUENCE FROM N.A.
 RA Yoshitake K., Murray J.C.;
 RT "A transcriptional map in the region of 19q13 derived using direct
 sequencing and exon trapping";
 RT Submitted (JAN-1998) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AF044965; AAC82347.1; JOINED.
 DR EMBL; AF044962; AAC82347.1; JOINED.
 DR EMBL; AF044963; AAC82347.1; JOINED.
 DR EMBL; AF044964; AAC82347.1; JOINED.
 DR InterPro; IPR001064; Crystallin.
 DR InterPro; IPR003599; IG.
 DR InterPro; IPR007110; IG-like.
 DR Pfam; PF00047; Ig_2.

DR SMART; SM00409; IG_1.
 DR PROSITE; PS00225; CRYSTALLIN_BETAGAMMA; 1.
 DR PROSITE; PS50835; IG LIKE; 2.
 FT NON TER 1
 SQ SEQUENCE 449 AA; 48152 MW; 6B0481EA70317CD2 CRC64;

Query Match 6.8%; Score 125.5; DB 4; Length 449;
 Best Local Similarity 24.7%; Pred. No. 0.0031;
 Matches 53; Conservative 32; Mismatches 87; Indels 43; Gaps 9;

QY 63 KYLAENVTSWPKVAKATNAVLC---PPIALNLIITWELLRGOSCTKAY----- 112
 DB 7 QVLPVRG-----QLGTVLPCHLLPVPGLYSLVWQ-----RDAPAHQNVAAFP 57
 QY 113 KETNETKENCNCTDERITWVSRPD-----QNSDQIRPAVATHGQYVCIMVT-PD 161
 DB 58 KMGPSPPSPKPSGERSLFSVAKSGSTQGDPAELQDATALHGLTVEDEGNVTCFAFPK 117
 QY 162 GNFRHGHYLOVLT-----EYTLFQNRNRNAVCAVAKPAQISWIPBDCATKOE 214
 DB 118 GSVRGMTWLVIAKPKNOLEAQKTFESODPTVALCISKEGRRPARIWLSLDEAKET 177

QY 215 YGNSN---GTVTCKSTCHWEVHNV---TVTCVSH 243
 DB 178 QVSGTLAIVTVTSRFLVPSGRADGVTVTCVYH 212

RESULT 12

Q91V79 PRELIMINARY; PRT; 467 AA.
 AC Q91V79;
 DT 01-DEC-2001 (TREMBlrel. 19, Created)
 DT 01-DEC-2001 (TREMBlrel. 19, Last sequence update)
 DT 01-OCT-2003 (TREMBlrel. 25, Last annotation update)
 DE Similar to poliovirus sensitivity.
 GN PVRL2.
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus.
 NC NCB1_TaxID=10090;
 RN [1]
 RE SEQUENCE FROM N.A.
 RA Tissue-Breast tumor;
 RA Strauberg R.;
 RL Submitted (MAY-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL; BC009088; AA09088.1; -
 DR MGD; MGI:97822; Pvr12.
 DR InterPro; IPR001064; Crystallin.
 DR InterPro; IPR007110; IG-like.
 DR InterPro; IPR003599; IG_V.
 DR Pfam; PF00047; Ig_3.
 DR SMART; SM00406; IgV_1.
 DR PROSITE; PS00225; CRYSTALLIN_BETAGAMMA; 1.
 DR PROSITE; PS50835; IG LIKE; 3.
 SQ SEQUENCE 467 AA; 50756 MW; 6B00C4B70A018C1E CRC64;

Query Match 6.8%; Score 125.5; DB 11; Length 467;
 Best Local Similarity 26.2%; Pred. No. 0.0032;
 Matches 59; Conservative 37; Mismatches 82; Indels 47; Gaps 14;

QY 63 KYLAENVTSWPKVAKATNAVLC---PPIALNLIITWELLRGOSCTKAYRKE 114
 DB 37 RVLPVRG---RIGTVLPCHLLPPTER-VSQVTWQRLDGVVAAFPBSEVDF--- 88
 QY 115 TNETKENCNCTDERITWVSRPDQNSDQ-----IRPAVATHGQYVCIMVT-PDGNFHG 167
 DB 89 ---PNSGFSRDRISFPARARETNADLRDNLARGLRVEDEGNVTCFAFPNGTRGV 144
 QY 168 YHLYOVLTP-----EYTLFQNRNRNAVCAVAKPAQISWIPBDCATKOEY-S 217
 DB 145 TWLRVIAQPNHAEVETIGPOGVAACVSTGRRPARITWTSISGAEKATQEPGIG 204
 QY 218 NGYTVKSTCHWEVHNV---TVTCVSHLTGKNSLYTELLPV 257

OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota;
 OC Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
 OC Ephydriidae; Drosophilidae; Drosophila.
 OC NCBI_TaxID=7227;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Berkeley;
 RX MEDLINE=20196006; PubMed=10731132;
 RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
 RA Amanatides P.G., Scherer S.E., Li P.W., Hoskins R.A., Galle R.F.,
 RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
 RA Sutton G.G., Mortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
 RA Brandon R.C., Rogers J.-H.C., Blasej R.G., Champs W., Pfeiffer B.D.,
 RA Wan K.H., Doyle C., Baxter E.G., Helt G., Nelson C.R., Miklos G.L.G.,
 RA Abrita U.F., Agbayani A., An H.-C., Andrews-Plankhock C., Baldwin D.,
 RA Ballaw R.M., Basu A., Baxendale J., Bayraktaroglu L., Beasley E.M.,
 RA Beeson K.Y., Benos P.V., Bernan B.P., Bhandari D., Bolshakov S.,
 RA Borokova D., Botchan M.R., Bouck J., Brokstein P., Broctier P.,
 RA Burris K.C., Busam D.A., Butler H., Cadieu E., Center A., Chandra I.,
 RA Cherry J.M., Gwaley S., Dahlke C., Davenport L.B., Davies P.,
 RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
 RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
 RA Durbin K.J., Evangelista C.C., Ferraz C., Ferrera S., Fleischmann W.,
 RA Foster C., Gabriellian A.E., Gary N.S., Gelbart W.M., Glasser K.,
 RA Glodok A., Gong F., Gorrell J.H., Gu Z., Guan P., Harris M.,
 RA Harris N.L., Harvey D., Heiman T.J., Hernandez J.R., Houck J.,
 RA Hostin D., Houston K.A., Howland T.J., Wei M.-H., Ibegwan C.,
 RA Jalali M., Kalush F., Kapen G.H., Ke Z., Kennison J.A., Ketchum K.A.,
 RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
 RA Laske P., Lei Y., Levitsky A.A., Li J., Li Z., Liang Y., Lin X.,
 RA Liu X., Mattei B., McIntosh T.C., McLeod M.P., McPherson D.,
 RA Merkulov G., Milshina N.V., Modyar C., Morris J., Moshrefi A.,
 RA Mount S.M., Moy M., Murphy B., Murphy L., Muzny D.M., Nelson D.L.,
 RA Nelson D.R., Nelson K.A., Nixon K., Nuskern D.R., Paclob J.M.,
 RA Palazolo M., Pittman G.S., Pan S., Pollard J., Puri V., Reese M.G.,
 RA Reinert K., Remington K., Saunders R.D.C., Scheeler F., Shen H.,
 RA Shue B.C., Siden-Kiamos I., Simpson M., Skupski M.P., Smith T.,
 RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
 RA Svitek R., Tector C., Turner R., Venter E., Wang A.H., Wang X.,
 RA Wang Z.-Y., Maasman D.A., Weinstein G.M., Weisenbach J.,
 RA Williams S.M., Woodage T., Worley K.C., Wu D., Yang S., Yao Q.A.,
 RA Ye J., Yeh R.-F., Zaveri J.S., Zhan M., Zhang G., Zhao Q., Zheng L.,
 RA Zheng X.H., Zhong F.N., Zhong W., Zhou X., Zhu S., Zhu X., Smith H.O.,
 RA Gibbs R.A., Myers E.W., Rubin G.M., Venter J.C.;
 RT "The genome sequence of *Drosophila melanogaster*.";
 RL Science 287:2185-2195(2000).
 RN [2]
 RP SEQUENCE FROM N.A.
 RC STRAIN=Berkeley;
 RA Stapleton M., Brokstein P., Hong L., Agbayani A., Carlson J.,
 RA Champe M., Chavez C., Dorsett V., Dreesen D., Farnon D., Frise E.,
 RA George R., Gonzalez M., Guarin H., Krommiller B., Li P., Liao G.,
 RA Miranda A., Mungall C.J., Munco J., Paclob J., Paragas V., Park S.,
 RA Patel S., Phoumenavong S., Wan K., Yu C., Lewis S.E., Rubin G.M.,
 RA Celniker S.;
 RL Submitted (MAR-2002) to the EMBL/GenBank/DBJ databases.
 RL EMBL: APO03823; AAF58595.1; -;
 DR EMBL: AY089628; AAL90366.1; -;
 DR FlyBase: F590033674; CG8964.
 DR InterPro: IPR007110; IG_11like.
 DR InterPro: IPR003598; IG_c2.
 DR Pfam: PF00047; IG_3.
 DR SMART: SM00408; IGC2; 2.
 DR PROSITE: PS00835; IG_LIKE; 3.
 KM Immunoglobulin domain;
 SQ SEQUENCE 433 AA; 47700 MW; DF81DC747417D6B5 CRC64;

Query Match 6.8%; Score 125; DB 5; Length 433;
 Best Local Similarity 21.7%; Pred. No. 0.0033;
 Matches 80; Conservative 55; Mismatches 142; Indels 92; Gaps 16;

Db 93 SEPQLETLNEDSRVALSKDSGALQFTSVLASDAGYQCOQLVIDSVASSSGVLLIVE 152
 QY 70 -----TSPYKATNAVLCCPPIALRLIIITWEILLRGQPSCTKAYRKETNET 121
 Db 153 QLFVPGPTSKNLEGLTSKVHCK-----AGGTFAQVQVMKRETOLEPLV 197
 QY 122 NCTDERITWVSRPDNSDLOIRPAVITHDGYTCIWTDPGNHRYHLOVLTPEVTLF 181
 Db 198 NVT-----DNGTLTFNQSNEORQGYTCIASNSGQITATVSIINVVAPKFSVP 247
 QY 182 QN-----RRTAV--CKAVAGKPAQIOWIPE---GDCATKQEYMS---NGTVTKST 226
 Db 248 PEGPIEVAEGTAVIHQAL-GEKPTIQMDKLTLYINENNTDPERFSLMENGTL----- 301
 QY 227 CHWEVAVN-----STYCHVSHLTGKSLYIELLPVPGAKSKAKLYIPYIIITLITIV 281
 Db 302 ---EIRVRPEDEGRYGTIGSSAGLKREIV-LLVTKSSKSASNSIVTRIIVIIICLAF 357
 QY 282 GTIWLKLVNGCRKVK--LNKTE-----STPVEDEMOFYASTKKNPLYDTNKV 331
 Db 358 YFVLIVGLKVMYRIRRLGKVLQEDGVNPGTQGHHDHNEPCLTEANSS-KNLKSKL 416
 QY 332 KASQALQSE 340
 Db 417 RESTILLEOE 425

Search completed: May 7, 2004, 11:42:12
 Job time : 48 secs

QY 28 AQPNNSLMTQ-----TSKENTALASS-----LCMDKQITQNTSKTLAEVN 69